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Although libraries are considered cricial to education, academic librarianship appears to rank as low-level administrative work. Paradoxically, many librarians were formerly teachers or workers in a quasi-intellectual field carrying more pay and prestige. This is possibly because many who are dissatisfied in such fields wish to remain in an academic milieu without its attendant problems. A small literature shows that some teachers leaving the field because of conflict situations have personality traits in common with practicing librarians. This investigation of library students who hope to become academic librarians used the California Psychological Inventory (CPI) and found that they had smaller mean scores than a composite of 14 other occupations on all but the Femininity Scale. The twenty percent who were dissatisfied with former work scored significantly lower than satisfied students on seven of the scales. Significant correlation was found between those who were satisfied with former work and those with high expectations for library work, and these students scored higher on eleven scales. The students were also found to have a mean Social Maturity score no higher than that of unselected samples, and 26 per cent had CPI profiles that were indicative of personality difficulties. A 48-item bibliography is appended. (Author/JB)

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U. S. Department of
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State University College at Brockport
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Brockport, New York

July, 1968

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CHAPTER I

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

Academic librarianship occupies an inferior position in the status system of American education. A perusal of library literature, for example, reveals a substantial number of writings that indicates a preoccupation with the question of whether librarianship actually is professional in nature. (4), (5), (17). Furthermore, evidence abounds that librarians typically are given less remuneration for eleven months of service than that received by classroom teachers for only nine months of work (16). And, finally, data are now available (12) to indicate that at least some educators perceive librarians not as fellow teachers, but as service-type persons who might best be described as bookmen.

Because educational credentials have become as important to librarians when seeking positions as they are to classroom teachers who are also wanting employment, logic would dictate that the status of each should be more equal. Moreover, highly qualified librarians are a rarity in the academic market-place; yet, after they are appointed to positions on the typical American college or university library staff they virtually always find themselves with less rank, less pay, fewer days of vacation, less prestige, and less campus responsibility than their teaching counterparts who have no more impressive qualifications.

It would appear, then, that an important factor, or set of factors, must be weighing against librarians as a group. It may be, however, that at least one such factor can be found in the make-up of librarians themselves. For example, those who succeed in any culture are the ones who vigorously participate in its dominant value--and on a college campus or in a public school that value is teaching. Those who do not participate are considered as auxiliary workers and as such are relegated to a subordinate position by those who do carry out the principal purpose of the enterprise.

The fact that most librarians do not teach regular classes in the typical college and university setting is so universally established that it scarcely needs elaboration here. One might ask then why a group who shuns the dominant value of a campus culture should brood about status, remuneration, vacations, and other professional trappings when the cardinal element in obtaining such benefits is greater participation in the classroom program. Perhaps it is because at one time or another many of these people have been involved with this value and appreciate its significance, but because of certain selective factors that are at work within all personalities they now deliberately choose not to face the classroom.

In this connection, a sizable literature is summarized by Getzels (7) in which it is pointed out that maladjustment among teachers is not uncommon. Other writers (2), (6), have noted that such conflicts sometimes cause teachers to leave the profession entirely; and, while conclusive evidence is lacking, it may be there are others who experience these conflicts but who also find it so difficult to leave education that they avoid this alternative by relocating in another area of the field. Whittock (19), for example, discovered that a large proportion of the library science students she studied had already been employed at some other occupation, usually teaching, and, in a comprehensive study of public librarians (3), Bryan notes that subjects participating in her investigation were not predominantly interested in library work. Such a combination of circumstances could mean that many persons turn to librarianship as a second occupational choice in the hope that discontentment associated with former work will be alleviated. If such is the case, and if these maladjustment and interest patterns are strong enough, such traits might help explain why librarians are willing to accept inferior remuneration, status, and working conditions.

Emotional disturbances are, as reported in various studies, common among both men and women teachers, although some writers (7), (14), (18), contend that it is more prevalent among the latter. Since approximately two-thirds of today's librarians are women (20), and because the above studies indicate that many librarians enter this field after first serving as either class-room instructors, or workers in some quasi-intellectual occupation, an interesting point to consider is whether the library has been a receiving ground for similar-minded persons with identifiable personality characteristics. Or, to state the question a bit differently, is the library receiving a disproportionate share of occupationally dissatisfied people from all walks of life, but particularly from those areas that are basically intellectual.

The purpose of this study was to determine whether distinctive personality characteristics, identifiable through statistical measurement, could be found among students of library science who were enrolled at a major Midwestern university during the summer session of 1967. More specifically, this study attempted to determine whether significant differences in eighteen personality traits could be detected among these students when they were arranged by such variables as sex, age, job experience, former work satisfaction, and the enthusiasm with which they looked forward to a career in librarianship. At the same time a more general purpose was also undertaken, viz., to make an exploratory comparison of these findings against comparable data pertinent to various occupational groups which have been reported in the literature.

As a guide for structuring this investigation, the following hypothesis was tested: There are significant measurable differences in patterns of personality variables which relate to biographical data of library science students. In examining this proposition, answers to questions such as the following were sought:

A. Personal Factors

1. Do any personality traits appear to be more prominent among women than among male students?

2. Do significant differences in personality characteristics appear among library science students when separated by such variables as marital status or chronological age?

B. Occupational Background

1. Are there significant differences in personality traits when students are arranged by the number of years they have been employed?

2. Do significant personality differences appear when past job satisfaction and expectations regarding library work are categorized?

Importance of the Study

The results of such an investigation should be of interest to administrators at all educational levels. These findings should have particular importance for those college presidents and secondary school superintendents who feel the library can and should make a greater impact on student study, classroom preparation, and attitudes toward scholarship. Such a study should also be significant to directors of library science programs throughout the U. S. These persons have the responsibility for upgrading the quality of professional personnel and unless such administrators have information available concerning those personality factors that delineate characteristics normally associated with types who can cope successfully with educational problems, much of the library school experience may be to no avail. Finally, heads of library departments in colleges and universities should also find these data pertinent, for it is up to them to translate the potential of each staff member into a positive program which aims at involving the library in the work of all teachers, students, administrators, and scholars.

DEFINITION OF TERMS

Virtually all terms used in this report are self-explanatory and need no elucidation. However, a limited number of definitions are presented below so that possible ambiguities and imprecise connotations can subsequently be avoided.

The phrase, Total Years Worked is meant to be the number of years which a participating library science student actually was employed in a full-time, self-supporting capacity prior to the summer of 1967. It includes experience gained as a teacher as well as work completed in fields outside of education. When it is necessary to differentiate between the number of years which a person spent in teaching and the number of years given over to all other occupational pursuits, the distinctive phrases Years of Teaching and Years of Work will be used.

The Expectation Scale is meant to be the 10-point rating scale embodied in the study's questionnaire. This scale was intended to represent a continuum of personal satisfaction from which respondents could indicate the amount of satisfaction they expected to receive as a full-time professional librarian once they completed a Master's degree in library science. The ratings on this scale were generated by asking each student to place a check mark over the number which nearly represented his expected satisfaction. In making such self-ratings, the number "1" was indicative of minimum satisfaction and "10" corresponded to maximum satisfaction.

The Satisfaction Scale was organized in precisely the same manner. The only difference between this scale and the one discussed above is that respondents were asked to evaluate the amount of satisfaction they realized from full-time positions they had held prior to June, 1967. On occasion, this report will distinguish between these two scales by referring to them merely as Expectation and Satisfaction.

At times, and for the sake of brevity, reference will be made to the four major divisions of the California Psychological Inventory. The first part of this paper-and-pencil Inventory consists of six scales that are intended to provide insight into the poise, ascendency, and self-assurance of those taking the test. When reference is made to statistical differences which apply to all six of the scales, the designation Poise, Ascendency, and Self-Assurance will generally be used. The second part also consists of six scales which give a measure of Socialization, Maturity, and Responsibility; and these terms will be used when reference is made to the entire second section of the CPI. The Inventory is comprised of two more sections, the first of which consists of three scales that provide measures pertaining to how efficiently a person uses his intellectual resources and to whether he achieves best in group situations or in autonomous circumstances. For purposes of this report, these three scales will be referred to as Achievement Potential. The final section of the CPI is another set of three scales, all of which attempt to measure the interest modes of examinees. These scales address themselves to such matters as how observant, perceptive, adventurous, appreciative, masculine, and rigid one might be. Although the term is seldom used in this report, Interest Modes will be the designation that identifies these three scales.

The California Psychological Inventory does not attempt to measure intelligence in the traditional sense. A substantial body of knowledge is now in existence to indicate that learning and achievement typically associated with academic performance is not a matter solely concerned with I. Q., but is, in fact, inextricably bound up with complex personality factors. Gough cites a study of Pierce (15) which indicates that the CPI's Re; To; Ac; Ai; and Ie scales are indicators of high achieving and low achieving high school students, and Gough's own study (8) showed significant correlation between school marks and 17 out of 18 CPI scales, with particular highs on Re; Ie; and Ac.

Therefore, as a crude index to the academic inclination of library students in this study, the three standard scores for the Ac, Ai, and Ie scales were consolidated into one composite standard score for each librarian. When this was done it was found that the mean standard score for all 35 librarians was 51.911, with twelve men falling below the mean and twenty-two scoring above. Three librarians scored below the second standard deviation while one was two standard deviations above the mean. The actual distribution was as follows:

Score	Number	Percentage
71	1	23%
61-65	7	
40-60	21	60%
35-39	3	17%
22-28	3	

These standard scores will be referred to as the Composite Achievement Score. It may be well to point out that among library students these three scales inter-correlated in a much higher fashion than is reported on p. 40 of the CPI Manual (11). The following compilation shows these correlations on male library students compared to the manual's unselected samples:

Scales	Manual	Librarians
Ac & Ai	.39	.68
Ac & Ie	.57	.78
Ai & Ie	.52	.81

While one would normally expect the variables to be more highly related in a sample representative of only one occupational group, these data do verify the fact that low scorers among librarians on one scale tended to be low scorers on all scales and vice versa. Consequently, the overall standard score index, or Composite Achievement score, is felt to be a reliable guide to each librarian's personal achievement orientation insofar as these three scales can measure such a quality.

DESCRIPTION OF ACTIVITIES

Description of Sample

This study concerned itself solely with students enrolled in the University of Oklahoma graduate school of library science during the 1967 summer session. Instead of basing this investigation on data taken from a random sample of these students, however, it was thought desirable to gather information from every full-time enrollee, a decision that resulted in the participation of 150 pupils, all of whom were at various stages in a professional program. The University of Oklahoma stipulates that a person must be enrolled in at least five hours of course work if he is to be considered a full-time summer session student; accordingly, this same requirement was adopted as a condition for participation in this study. The inclusion of all students, rather than reliance on a random sample, not only allowed the largest possible participation, but it also permitted more categories to be closely observed. Because each participant in this study was a library science student, one might expect from a reading of the literature that the chronological age span would be considerable. While this investigation did not attempt to ascertain exact ages, these findings did indeed substantiate data from earlier studies in that the range of ages went from 22 or less to over 40.

The decision to study students at the University of Oklahoma was based on a number of considerations. In the first place, students enrolled in library science at that institution are of various ages, they typically go into assorted types of library work, and they are socially and economically representative of the population. Another important consideration was that the student body at Oklahoma University is drawn from the entire nation and it is by no means comprised solely of those living in the state of Oklahoma, or even in the Midwest. Even so, this investigation does not presume to generalize or claim that its findings have national applicability; on the contrary, the only point being made here is that there is no reason to believe these students are atypical of those in schools of library science at any institution.

But even if these students were different from persons in other library schools, the matter would probably be of little concern since the intent of these data is to be exploratory rather than definitive. The scope of this study was purposely delimited to students in only one school, partly to maximize the modest resources supporting this study, but more importantly because there is only a limited number of investigations that have given attention to the personality of librarians. This means that present literature on this problem is exceedingly scant--so scant, in fact, that at this time there is little need even to think in terms of ultimates; therefore, until more is known about the kind of person who aspires to become a librarian, the most usable kind of data may very well be that which is limited in scope and cumulative in effect. If so, studies such as the present one should be replicated until a pattern of findings emerge which can be formulated into a scientific hypothesis and tested on a national basis. Until then, valid conclusions obviously cannot be extrapolated to the general area, and because of this results such as those reported here must necessarily be thought of as tentative.

The 1967 summer session was not randomly selected for study. Registration data, however, indicated that students who were enrolled during this time, and therefore were participants in this investigation, were entirely representative of students normally found in summer sessions at this university. A summer session was chosen instead of a time during the academic year because the months of June and July not only bring more students to library school, but also because those who do attend are more varied in their educational backgrounds.

Procedures used to Collect the Data

The entire faculty at the University of Oklahoma School of Library Science made class time available so that data for this study could be collected quickly and efficiently. This magnanimous gesture not only facilitated the work of this study, but also made it possible for each student of library science to act as participants. As students reported for class they were given a packet containing a copy of the California Psychological Inventory, 1956-57, and a specially designed questionnaire which was intended to elicit supplementary information of a biographical nature. As stated above, these two instruments were completed during regular class periods, with administration of the tests under the supervision of the investigator and cooperating teachers at the University. While it may be argued that such a procedure raises the spectre of a captive audience, it was felt that any disadvantage of this kind would be more than offset by the fact that all students would be present and maximum return could be expected. The students were specifically asked not to identify their answer sheets in any way, and upon completion of the test they placed both Inventory, answer sheet, and questionnaire in a sealed envelope and handed it in anonymously.

The chief reason for selecting the California Psychological Inventory as the instrument of this investigation is that it concentrates on constructive achievement as well as on the positive aspects of inter-personal behavior. Had this study been concerned with personality flaws and weaknesses, especially regarding the manner in which they effect work habits, an instrument such as the Minnesota Multiphasic Personality Inventory or the Bernreuter Personality Inventory would have been chosen. On the other hand, this study might have concentrated on vocational interest patterns and how they relate to biographical data that is peculiar to a sample of library students. In this case, such tools as the Kuder Preference Record, the Strong Vocational Interest Blank, or Allport's Scale for Measuring the Dominant Interests in Personality might have been appropriate. But, because at least preliminary work has been done in these areas--work which, incidentally, is reviewed in the following chapter of this report--this investigation attempted to study a part of behavior which is reflected in everyday temperament. For this, data was desired that would show styles of expression among subjects who do not classify as deviates or abnormal; and, accordingly, it was felt necessary to make a choice from among those instruments that were believed to be peculiarly suited to such a purpose. Fortunately, a number of specialists, including such men as Raymond Cattell and Allen Edwards, have spent considerable time in this one area of personality research, and as a result several standardized tests are available which would have been quite applicable to the present investigation.

The California Psychological Inventory, however, was felt to be particularly appropriate for a number of reasons. An over-riding purpose of this study was to gain some insight into the growth, development, and spontaneity of the subjects, and because the 18 scales of the CPI were specifically designed to measure such qualities in the context of social living, they seemed to have unusual relevance to this investigation. Furthermore, the CPI is aimed at the social side of personality, and because of this emphasis it attempts to focus on matters which are considered most important to everyday living. And finally, the CPI was considered appropriate because it has validity beyond the concepts of middle class America. The author of the CPI has carried out numerous studies in an attempt to validate the various scales of this instrument on international samples, and as a result the Inventory has an added measure of significance to this study because of its power to measure certain traits or inclinations which have universal application.

The California Psychological Inventory is a standardized pencil-and-paper test which is completed by responding either "true" or "false" to the questions presented. The questionnaire, on the other hand, consisted of only ten points and was intended to ascertain such matters as whether the subject had previously been employed, whether the position was satisfying, and whether the subject felt that librarianship would be rewarding. To answer the questionnaire one had only to place a check mark in selected categories, including those points that were scaled so that respondents could show degrees of enthusiasm for their work. A copy of the questionnaire is included in the Appendix of this report.

Analysis of Data

The raw data of this study, generated by library students in response to questions on the California Psychological Inventory and a specially designed questionnaire, was collected on commercial NCS answer sheets which were subsequently sent to the National Computer Systems Corporation in Minneapolis for machine scoring. Upon receipt of that company's electronic tabulations, the 18 scores for each student were sketched on the CPI profile sheets so that visual study could be made of all respondents. The raw scores for each scale in the Inventory, as well as for answers from the questionnaire, were then transferred to punched cards so that statistical computations could be made with local IBM equipment.

Because data from this study aligned itself in a normal distribution, only parametric tests were used for analyzation. In this way maximum sensitivity was preserved and the most powerful tools for rejecting null-hypotheses were utilized. With a few exceptions that will be explained in the course of this report, the specific tests which were employed for analyzing these data were the student "t," the Analysis of Variance, and the Pearson Product Moment Correlation. It is recognized, of course, that rather weighty assumptions are inherent in use of parametric procedures and because of this it was necessary to know that (1) the observations under study were drawn from a normally distributed population, (2) that the different populations had equal variances, and (3) the observations were independent and measurable in at least an interval scale. In conclusion, it should be noted that most findings throughout this report are given in exact probabilities as they are listed in commonly used tables. By this means a much clearer picture can often be had of those results which are either so close to the critical limits, or so far from these designated points, that this fact alone tells a great deal about the test score.

Basic Assumptions

Unfortunately, no investigation of this kind can be 100 per cent objective, for basic assumptions underlie all studies in the behavioral sciences. In the case of this study, it was necessary to assume that all students would answer both the Inventory and the questionnaire as truthfully and as candidly as possible. Clinical psychologists, of course, are aware that the CPI has certain devices built into the test for discovering dissimulators; nevertheless, such features are only partial answers to the problem and because this is the case, one must assume in the administration of any large-scale paper-and-pencil testing program that the respondents will show competence and willingness to answer all questions.

It was also assumed that various validity and reliability scores pertaining to the CPI would be applicable to this sample of 150 library students. There is a substantial literature relating to various scales in the California Psychological Inventory (11), (13), (1), as well as numerous writings which deal with various formulae derived from various combinations of CPI raw scores (10), (9). The appropriateness of these scales, as they can be applied to librarianship, is also assumed.

The assumptions surrounding use of the questionnaire may be more tenuous in a scientific sense. This instrument was not subjected to national norms, so validity and reliability measurements cannot be given. The questions were, however, assembled only after a number of comparable instruments by researchers throughout the nation were examined. The questionnaire was then submitted to professors of psychology for their comment and correction, after which it was administered on a trial basis to twenty cooperating students at State University of New York, Brockport, N. Y. Their comments and suggestions were also incorporated into the completed instrument of which a final draft is included in the Appendix of this report.

LIMITATIONS OF THE STUDY

It is realized that this investigation is limited to the extent that the above assumptions can be called into question. Moreover, this study dealt with students from only one institution of higher education and because of this fact there is no intention to project these findings to a larger area or to claim they are valid for all students of library science. As pointed out earlier, however, there is no reason to believe these persons were anything but typical of library science students who are found in any school accredited by the American Library Association.

Furthermore, it is accepted that no personality can be reduced to purely statistical analysis. While it is true that various tools have been designed which do give rather subtle gradations in ranges of scores, the complexities of a personality have eluded learned psychiatrists for decades and it is not likely they will ever yield to purely mathematical formulae. Therefore, this study accepts the limitations which these tools impose and it assumes nothing beyond what the methods of measurement pretend to delineate.

Another recognized limitation is that the data is representative of only one point in time. From this it follows that these findings may not be valid in future or unforeseen circumstances, even though they merely deal with results and make no attempt to explain causes. A final limitation grew out of the fact that many students completed both the Inventory and the questionnaire in a set period of time. One hour was ample for the overwhelming majority of respondents to complete both instruments; but, some found it necessary to stay past the class period and because of this it is possible that selected students may have felt a certain necessity to hurry.

ORGANIZATION OF THE STUDY

Throughout the present chapter, introductory material has been presented which not only acts as a setting for the study but also cites reasons for its importance. Attention has also been directed toward the purpose of the investigation, the sources from which the data were gathered, and the limitations under which the entire study was undertaken.

Chapter II is intended as a review of literature that is pertinent to this investigation. Works of a research nature having to do with problems of maladjustments among public school teachers and their job efficiency are cited and discussed. Chapter II also reviews the rather meagre range of literature surrounding the personality of librarians and how findings in this area compare to those which pertain to other occupations.

The succeeding chapter is devoted to a presentation and analysis of those data that were generated by the 35 men in this investigation. Tables and diagrams are presented in an effort to elucidate a text which explains the various ways in which these subjects were arranged so that intra-group differences could be studied through statistical analysis. In addition, a brief presentation is made concerning comparisons between library students as a group and scores on each of the 18 CPI scales that have been generated by other occupational groups.

Chapter IV follows the same pattern as that noted above except this section is devoted to analyzing data that is descriptive of the female library students. Because the number of women participants was three times greater than the number of men, many more sub-groups could be examined in detail. Such groupings include married women, single women, those who taught prior to entering library school, and women arranged by the number of years they held full-time positions.

The final section is a summary of these findings and a short statement concerning possible conclusions. The report closes with a discussion on topics that are recommended for further study, plus a short statement relative to the importance of further research as an aid in identifying persons who can not only make the greatest impact on education, but who can also demonstrate the place of libraries in the total learning process.

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CHAPTER II

REVIEW OF PERTINENT LITERATURE

Evidence from professional writings indicate that school and college librarians are recruited in large numbers from the ranks of classroom teachers. This means that some unknown must be operating in the experience of many educators which causes them to abandon the classroom and devote their time to library science. Such an unknown may be dissatisfaction associated with classroom teaching; or, it may be that personality characteristics act as a selective agency in bringing certain individuals to library work. More likely, however, is the possibility that a combination of such factors is at work, and, if so, librarians and disgruntled classroom teachers should manifest a common set of personality characteristics that would be identifiable through various analytical procedures.

A considerable body of literature concerning teacher personality is already at hand; however, a comparable set of writings pertaining solely to librarians does not exist. Yet, if it is true that large numbers of people enter librarianship after having worked in other areas, and more particularly teaching, even the meager literature now available should show some personality characteristics common to these various occupations. This summary, then, will concentrate on the personality of teachers and librarians with a view toward determining whether present research indicates that librarians demonstrate traits commonly associated with dissatisfaction, poor performance, and a distorted occupational outlook.

Adjustment, in the psychological sense, is often thought of as the relationship between a person and his environment. Good (14) mentions that if this relationship is inadequate a tension will naturally develop. Because it is crucial for a person to live in his environment harmoniously, it becomes important to understand behavior patterns which lead to better adjustment through adequate release of tension. Living without severe or prolonged tension then, calls for a repertoire of behavior which can cope with a variety of demands found in life situations. Such a concept follows that of Drever's (9), for he defines maladjustment as being "unable to adapt or adjust adequately to physical, occupational, or social environment."

Various writers have been concerned for a long time about personality characteristics among teachers because the traits which educators manifest have an immediate impact upon young people. One investigator with such a concern is Morgan (20). While he feels emotional balance is important to all teachers, it is especially so for those in elementary work, since it is here that one has to deal intimately with the complexities and activities of unsophisticated minds. Emotional control for Morgan is so crucial in fact, that according to his view teachers succeed only when others can do no more than guess what they are actually experiencing.

That this is difficult to accomplish is axiomatic. But just how difficult it is to accomplish is discussed by Havighurst in an article (17) which claims the successful person is one who fulfills many expectations of his own while simultaneously meeting the expectations which other people also hold of him. This is difficult for the average man, says Havighurst, but it is doubly troublesome for the teacher because he must succeed in such contradictory roles as an authoritarian, a counselor, and a friend. Furthermore, traditional-minded teachers must adjust to the plethora of social backgrounds now found among contemporary students and to the ever-widening list of courses that continually invade the curriculum. Finally, many find it difficult to accept the fact that union sympathizers are infiltrating the ranks of educators, racial and religious traditions are continually being swept away, and teaching assignments are becoming ever varied.

Teachers show a significant range in their ability to adapt to such an array of changing conditions. Gordon (15), for example, found that a wide range existed in the amount of personal anxiety teachers experienced while trying to carry out the teaching function. While some are able to routinize their work until they minimize stress, others fail at this and in a situation of conflict, the teacher develops constant anxiety for his ability to control.

Some appreciation can be gained of how widespread teacher adjustment problems have become by examining the Encyclopedia of Educational Research (1:1359). This work points out that while nine out of ten teachers believe their job is normally satisfying, and while 66 percent of urban women teachers and 74 percent of rural women teachers would be willing to choose again teaching for their life work, only 43 percent of the farm men and 44 percent of city men would again choose to teach. Anderson also points out that teachers, in comparison to non-teaching groups, generally have lower need values, less desire for prestige, less anxiety for income or professional recognition, and a lower level of salary aspiration.

Such data lead quite naturally to a consideration of what motivates educators and what are the satisfactions they hope to receive from their work. Frierson (12) found that mental health, as reflected in satisfactions and dissatisfactions, appeared to be a factor in teacher turnover. Her study indicated that when satisfactions were important enough, educators did not drop out of teaching; however, when dissatisfactions did become strong, teachers either left the profession or moved to schools in other locations. This investigation incorporated a rating scale in which the strongest satisfactions and dissatisfactions were characterized as "to a great extent." Using this as a criteria, persons who expressed the largest number of dissatisfactions had fewer satisfactions "to a great extent." Translating this into an example, one person was found to have registered dissatisfaction on twenty-one items while indicating only five satisfactions "to a great extent." In another case, a participant checked twenty-one dissatisfactions but no satisfactions "to a great extent."

Barker (2) is another researcher interested in personality adjustment, particularly as it relates to teaching efficiency. He found that the better teacher showed a more enterprising attitude, was positive and dynamic, more creative, frank and direct. Furthermore, the better teacher had varied interests while feeling certain and secure. On the other hand, the below average teacher demonstrated slower responses and complained significantly more. In correlating fourteen personality scales with teaching efficiency ratings that were done by school administrators, findings appeared which indicated a marked pattern of relationship between teaching efficiency and the following seven traits: (1) educational philosophy, (2) future goals, (3) pupils, (4) school administrators, (5) school environment, (6) emotional situations, and (7) professional growth. Much less association existed between teaching efficiency and adjustment to (1) family relations, (2) living conditions, (3) health, (4) finances, (5) friends, (6) sex, (7) religion.

Other research projects devoted to a comparison of teacher ratings and various personality traits are not difficult to find in educational literature. One such study was done by Symonds (27) in which teachers were rated by students. On the basis of such findings it was concluded that superior teachers were personally secure and self-assured while inferior teachers were not only personally insecure, but suffered from feelings of inferiority and inadequacy. Statistically speaking, superior teachers were found to be well integrated and in possession of good personality organization, while inferior teachers tended to be just the reverse, or personally disorganized. The points on which these teachers were rated were (1) disciplinary control, (2) relationship with pupils, (3) success in terms of pupil achievement, and (4) all-round excellence. It is interesting to note that this study showed higher correlation between ratings of teachers made by pupils and principals than is customarily found in literature.

Another example of correlating personality traits with teaching effectiveness is found in an investigation by Retan (24). His study first concerned itself with student teachers, and findings indicated that the most common type of maladjustment among these subjects was undue self-consciousness, personal sensitiveness, and feelings of inferiority. After a period of time, when the students had gained two to five years experience in teaching, Retan reviewed evaluation reports on these people which had been filed in the offices of county superintendents. At this time it was discovered that 75.3 percent of the previously rated stable teachers were characterized as good or better while only 24.7 percent of the same group were evaluated as fair or worse. However, no more than 50 percent of the unstable group was rated good, leaving the other 50 percent with a score of fair or worse. Moreover, a chi-square correlation test indicated highly significant relationships between the factors. In examining the reasons which were given for the poor ratings, the following seemed most evident: (1) poor scholarship, (2) lack of definiteness, (3) lack of initiative, (4) did not like to teach, (5) non-social, (6) has other interests, (7) lazy. Despite these findings, it is important to note the author concluded that emotional stability was in itself not conclusive evidence of unfitness for teaching. After all, 30 percent of those studied had some instability and yet were classed as good teachers.

The Handbook of Research on Teaching (13:555) also noted that on the basis of what is now known concerning teacher ratings and psychological disturbances, one should not conclude too much. Such cautiousness stemmed from the fact that in the literature reviewed, only 8.8 percent of the experienced teachers and 2 percent of the prospective teachers were maladjusted. Pressey (23), however, found that of 600 teachers studied, 10 percent admitted having had a nervous breakdown and 17 percent were classed as unduly nervous. While it is true that extreme maladjustment, according to Pressey, may be no more frequent than in the entire population, in twelve years of school, a student does have a seven to one chance of having two maladjusted teachers. To dramatize this, he cited findings from five thousand teachers in which 37 percent admitted having had persistent worries so as to interfere with sleep, efficiency, and health.

A question might be asked whether teachers become maladjusted after serving in the classroom or whether such persons are disturbed before they ever enter the field of education. Data cited by Brookover (4:288) is inconclusive on this point; however, the studies he does cite would indicate that student-teachers are more stable than experienced teachers. A question similar to this whas the focus of Blum's survey (3) in which he compared the interests of students who were pursuing different subject majors in college to their personal characteristics. He partialled out pupils in (1) education, (2) law, (3) medicine, (4) journalism, and (5) mechanical engineering, and found that the greatest difference between the groups was their vocational and non-vocational interests, rather than their personality traits. Blum concluded that on the basis of his data, education students are not inferior to other groups in personality traits.

In this same work, Blum made reference to a study by Ross Stagner. Here, the purpose was to analyze selective effects of different courses taken by students at the University of Wisconsin. In answer to the question, "Do students tend to select a given course because of a certain trend in personality traits?", it was found that among 335 men who took the Bernreuter Personality Inventory there were no significant differences. Among the 317 women, however, the discovery was made that those majoring in letters and sciences tended to be somewhat neurotic, very low in self-sufficiency, introverted, and average in dominance. Students studying nursing were similar to those in letters, except that in addition to those traits listed above, the nurses showed signs of submissiveness. In conclusion, home economic students were characterized by extroversion and submissiveness, while education pupils showed dominance as distinguishing traits.

Probably the most extensive survey of traits and interests among librarians was that done by Bryan (5). Although her sample was comprised entirely of public librarians, the findings are nevertheless significant because they appear to demonstrate characteristics similar to those found in school and college librarians. For example, the Guilford-Martin Inventory of Factors indicated that public librarians scored below average on "G," i.e., urge for physical activity and work. They scored less than average on ascendency in social situations; they were average on masculinity of interests; and their scores indicated that both men and women librarians have a degree of congeniality in attitudes and interests.

Bryan's findings, through the Guilford, also showed that librarians are not only lower than average in self-confidence but that they also have feelings of inferiority. It is interesting to note that the married men as a group, compared to unmarried men, scored (1) lower on zeal for overt activity, (2) higher on masculinity of attitudes and interests, (3) higher on self-confidence, (4) lower on nervous tension and irritability, and (5) equally high on social ascendency. In comparison to this, the married women, as opposed to the unmarried, scored (1) higher on overt activity, (2) higher on social ascendency, (3) higher on self-confidence, (4) higher in nervous tension and irritability, and (5) lower on femininity. It is important to note that at the time this study was made a large percentage of librarians were single women. This would mean, then, that a substantial proportion of those who participated in this study were submissive, lacking in self-confidence, and afflicted with feelings of inferiority. Furthermore, they had no more than average drive for overt activity and probably had less than a normal degree of nervous tension and irritability.

An older study (21) showed somewhat similar findings among teachers. Here, Peck noted that according to the Thurstone Personality Schedule women teachers as a whole were not so well-adjusted as the men; in fact, only one-fifth of the women could be classed as well-adjusted. Peck also emphasized that significant differences between the personality traits of men and women were found, indicating that women (1) were more moody, (2) were more frequently in a state of excitement, (3) were more easily upset, and (4) more often considered themselves ignorant of sex. It appeared from these findings that among women teachers, adjustment improved as teaching experience increased. For example, those with only one year of teaching experience were the most poorly adjusted while those with more than ten years experience had highest adjustment scores.

This last finding has substantiation in another survey of about the same time (22). Phillips and Greene, in using the Bernreuter Personality and the Bell Adjustment Inventory, noted that among single teachers neuroticism reaches a peak at about age thirty, after which it declines. Among the married group studied, however, improvement in adjustment came with age. And, in an even earlier investigation (31), Watson found that among adult students of education the married men believed themselves to be happier than the women believed themselves to be. In a much more recent survey of this topic (13:567), it was found that male teachers at both elementary and secondary levels appeared to be markedly more emotionally stable than female teachers. Even so, 42 percent of the least-liked, and 47 percent of the best-liked teachers were seriously maladjusted.

Apparently the only piece of research expressly intended as a study of personality traits among librarians is the one done by Douglass (7). This investigation was an attempt to identify, and subsequently describe, those characteristics found among students attending seventeen library schools in the U. S. The sample included 525 men and women who were enrolled during the academic year of 1947-48; however, twenty male students attending Texas University were later added, thus bringing the total number of subjects to 545. The overwhelming number of these people participated on a volunteer basis and the instruments from which the data were gathered were completed at the convenience of instructors in the various schools.

Douglass structured his investigation around the librarian as a general type. He therefore did not concern himself with such variables as the successful versus the unsuccessful, or the frustrated versus the satisfied. Together with a three-page questionnaire, a number of personality tests were administered to the students, all intended to produce data concerning personality, interests, and values. The five standardized tests completed by subjects of this study were (1) the Minnesota Multiphasic Personality Inventory, (2) The Alport Study of Values, (3) The Alport Reaction Study, (4) The Terman-Miles Attitude Interest Analysis, and (5) The Bernreuter Personality Test.

From the data secured with these instruments it was concluded that librarians do not possess many traits commonly associated with forceful leadership or distinguished scholarship. Furthermore, Douglass' report mentioned that imaginative research and creative attainments, both of which are characteristics that are glorified in academic circles, were also lacking among those studied. On the other hand, these findings indicated that librarians were orderly, meticulous, neat, and compulsive. Other data pictured the male librarian as one with feminine interests, at least when compared to men in general. Insofar as their outlook on life was concerned, Douglass' study characterized librarians not only as conventional and traditional in thinking, but inclined toward stereotyped opinions and attitudes as well.

It was noted in an earlier section of this review that Frierson had found job satisfaction to be a significant factor in teacher turnover. While job satisfaction undoubtedly does cause many teachers to move from one school to another, such a variable is probably just as important in matters that effect status. The relationship of status to personality characteristics has not been well researched even though Haines (16) did find that elementary teachers often try to gain status by becoming secondary teachers, who in turn often aspire to college teaching. This study also concluded that many teachers feel the greatest incentive for improving their teaching techniques, and even for further study, lies in the possibility of gaining improved status within the school hierarchy.

For an adult to put aside a full-time, self-supporting job and return to the classroom as a student is no easy task. To do this, a person not only must be highly motivated but he must also feel that such study will somehow result in either (1) a better job, (2) more status, or (3) more satisfaction. Speculation along these lines is especially pertinent when applied to students of library science, for people in this discipline are typically older than graduate students from other fields. This is indicated by Whittock (32) in his study of library science students at Drexel Institute, for his report points out that the average age of non-working, full-time students was 28.03 years, while 32.6 years was the mean age for a different group who found it necessary to mix work with going to school. Among the public librarians which she studied, Bryan (5) found that two out of five had worked for at least one year in another field before becoming librarians and of this number more than half had experience in teaching. While this figure would probably have been much higher if public school or college librarians had been measured, it still is impressive and just as significant is the fact that after education, in order of frequency, came business and writing. As public librarianship is generally less remunerative and usually does not carry the status of any of the three rejected occupations a pertinent question might be asked as to why these persons left their first interest and became librarians.

The participants in Bryan's study were rated as well-educated and described as originally preferring a career that required considerable creative talent. Feeling insecure about this, however, and not being competitive, as noted earlier by the GAMIN scores, these people turned to a related but safer occupation. When asked why they did not go into some other type of work, two out of five mentioned they thought librarianship would be more enjoyable. On the same question, 16 percent said they felt inadequate in ability and training for their preferred work, i.e., music, artistic, literary, and administrative; while a like number felt their first choice would provide a too uncertain income.

It is also noteworthy that among Bryan's subjects, only a small minority participated in outside activities. While it is true that 50 percent of these librarians were church members, only 10 percent of them belonged to fraternal organizations, 12 percent were members of civic betterment associations, and a mere 6 percent were active in political associations. Finally, it was noted that the percentage of librarians serving as officers or chairmen of community organizations was small indeed.

A dominant interest among these people, however, was that of reading and study. In this, Bryan's findings seem to be indicative of a strong interest which librarians and teachers have in common. Such a commonality of interests can be seen in a much earlier study by Mason (19) in which it was found that reading, study, and introverted activities were the hobbies of teachers. This writer went on to conclude that as a group, teachers lacked social and recreational interests. This is similar to findings that are found in a work cited earlier (22) for there it was stated that introvertive teachers appear to have introvertive hobbies while extrovertive teachers have extrovertive hobbies.

Attitudes of librarians have also been the subject of some investigation. In this connection, Thornton (30) found that among public, school, special, and college librarians, the latter group had a significantly less favorable attitude toward librarianship than the first three. It should be noted that data for this study was gathered from a questionnaire sent only to Georgia librarians and that a return of only 51 percent was effected. Nevertheless, this unfavorable inclination toward librarianship found corroboration in Bryan's survey. In this case it was noted that on the Strong Vocational Interest Blank librarians not only failed to score an "A" on interest in librarianship, but in no occupational category did they receive an "A."

Whittock (32) is another investigator who was concerned about interests of librarians. This study concentrated on sixty-five students enrolled in the library science school at Drexel Institute and used both the Strong Vocational Interest Blank as well as the Kuder Preference Record. Whittock's contention was the entirely plausible one that people want to do what they like and what they are interested in doing. Furthermore, he went on the assumption that personal relationships within an occupation would be more congenial if workers in that field held similar interests. This investigation tended to substantiate Bryan's earlier work in that Whittock's subjects, as measured by Strong, also failed to earn an "A" for interest in librarianship.

A more favorable finding concerning interests of librarians comes from a survey made by Taylor (28). In an unpublished Master's thesis, he used the Strong Vocational Inventory to gather data from 250 men scattered across the U. S. Taylor, as opposed to studies cited above, was able to take opinions from a number of men in library administrative posts where, presumably, the work eschews narrow technical details and instead is devoted to matters that generate maximum interest. The 250 men participating in this study did receive a grade of "A" on the Strong, and in comparison to women, Taylor concluded the interests of men were less general, less diffuse, more intense, and more specific.

In view of the various interest studies that have been done, it is not out of order to ask how well the interests of librarians compare to those of people in other occupations. In this regard, a basic purpose in Whittock's study was to determine whether particular interests could be detected among the Drexel students as opposed to Kuder's base group of women. With probability of error at less than 1 percent, data on these students indicated they were less interested than the base group on such scales as (1) mechanical, (2) computational, (3) clerical, and (4) persuasive. At the same statistical probability, it was found they were more interested in artistic and literary pursuits; however, at $p<.05$, or with slightly less certainty, they were less interested than the base group in social service.

One other bit of insight into the interests of librarians can be gained from Bryan's study (5:37). Only one out of four of the women studied were married, while two-thirds of the men were married. Among the married women, 4 percent had married after age 35 while 10 percent of the men married after passing this age. Even more interesting, however, was the finding that not only did 79 percent of the single women want to marry, but 39 percent indicated they wanted to marry and give up library work altogether. An additional 3 percent wanted to marry and subsequently try some other type of job.

The fourth edition of Who's Who in Library Service (33) indicates that women in librarianship still outnumber men by a margin of three to one. If Bryan's findings are still valid, this would indicate, despite Taylor's more recent data, that a large segment of librarians are not interested in what they are doing. Bryan does mention that men's interests range over a broader area than those of women; moreover, men and women librarians share a common interest in occupations that run to the literary and artistic. However, women far outnumber the men, and while the latter score "B+" or better on five occupations outside their own field, women as a group score no higher than "B" on any occupation including librarianship. With this in mind, it is noteworthy to remember that Getzels (13:556) reported, "Good teachers think more about teaching than do poor ones."

In the absence of evidence, one can hope that the conclusion which Frierson (12:112) made for his study does not hold for librarians. This study was summed up by the statement that unmarried women teachers have not always availed themselves of sublimating diversions, and in their absence they have allowed interests to become narrow and circumventing. When denied a normal sex life, plus the responsibilities of a family, many of the women have complied with the stereotyped maiden teacher in mental and physical characteristics.

There can be little doubt that continued exposure to an uninteresting situation can lead to maladjustment. English and Pearson (10:386) must have had this in mind when they wrote that the complaints of teachers concerning fatigue are often activated by neurosis or neurasthenia. They go on to state, "Doing a job day after day for which no zest is felt, contributes to this kind of fatigue which is psychological rather than physiological in its basis. People are fatigued who are uninspired about their work. Uninspired people are the ones who are always talking about being tired of the job or of life, which expressions grow out of the fact that they actually suffer a sensation of fatigue along with their lack of interest."

In summary, this review indicates that changing conditions in education may be causing problems of adjustment for many teachers. Many of these changes result in various pressures on the teacher, for in one way or another change will bring dislocations in the social workings of the school and often generate some problem situation involving students. While present research does not establish what specific conditions lead to teacher maladjustment, evidence does indicate that instructors are not equally successful in adapting to the classroom. Personality traits, however, are found within the teacher just as they are present in everyone, and these play at least some part in his overall success, for studies have shown that such characteristics do have bearing on teacher effectiveness.

No research is available to indicate that teachers develop certain personality traits after entering the profession which causes them to leave the classroom and become librarians. Conclusive evidence, however, does indicate that many librarians enter the field after having worked in another occupation--and more particularly education. The notion that disturbed teachers might want a more congenial atmosphere in which to work gains some support from those findings which state that librarians as a group are low on personality scores which denote zeal for competition and accomplishment, leadership, and overt activity. That disturbed teachers are found in American schools is revealed in studies which state that approximately 10 percent of those investigated appear to have had a nervous breakdown or some illness of a comparable nature. In addition, 37 percent of the teachers mentioned in various reports apparently have persistent worries that result in disturbances of one kind or another.

Further confirmation that librarians may come from an unhappy group can be found among scores reported on interest tests. As measured by the Strong Vocational Inventory, a sizable percentage of librarians indicated they were not particularly interested in their work. While at least one group of men librarians did score "A" on this instrument, the ranks of librarianship are mainly filled with women, and among this sex the unmarried are present in sizable proportions. One investigation pointed out that a sizable number of such women desired to marry and leave the field of librarianship.

The present study, then, using this literature as a point of departure, will try to determine whether biographical data concerning these various types show any relationship to personality variables. From such data, it is hoped that more understanding will be gained concerning the librarian in education when studied against the background of personality, sex, marital status, former job satisfaction, and occupational outlook.

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CHAPTER III

ANALYSIS OF DATA ON MALE LIBRARY STUDENTS

CPI profile sheets automatically transform raw data into standard scores. Because of this capability, the separate male and female norms show clearly that identical raw scores for each of the sexes will not produce comparable profiles. The most notable difference of this kind appears on the Femininity scale, for a man who has a score of 15.5 is assigned a standard score of 50, a place which is mid-point on the profile. On the other hand, a woman who scores 15.5 is placed two standard deviations below the mid-point, her standard score being approximately 29. In as much as the California Psychological Inventory does measure scores of men and women in this manner, findings for these two groups will be reported in successive chapters, each dealing with data that pertain to male and female students respectively.

Of the 150 students who participated in this study, 35 were men. Of these 35 men, 21 were married and 14 were single--none reported that they were divorced or widowers. A majority of these men were at least 26 years of age, with only one indicating he was no more than 22. Table 1, derived from the questionnaire of this study, gives a breakdown of how the men's ages were distributed in the several categories. From this compilation one can see considerable substantiation for those studies which indicate that library science students are usually older than mean ages of various other groups in graduate school; as one example of this, the modal age of these pupils was between 26 and 30.

The questionnaire also attempted to discover the occupation of these students immediately before entering library school. With this and other pieces of information, it was hoped that a compilation could be made that would compare the amount of satisfaction these men derived from former work to the satisfaction they expected to realize from a

TABLE 1

NUMBER OF MALE LIBRARY STUDENTS
WHOSE AGES COINCIDE WITH
CONSECUTIVE CATEGORIES

Age	22 or Less	23-25 Years	26-30 Years	31-40 Years	Over 40
No. of Students	1	9	12	8	5

TABLE 2

SUMMARY OF 35 MALE STUDENTS SHOWING
NUMBER OF YEARS SPENT IN TEACHING
OR OTHER FULL-TIME WORK PRIOR
TO ENTERING LIBRARY SCHOOL

	Number of Years Spent in Teaching					
	0 Years	1 Year	2 Years	3-5 Years	6-10 Years	Over 10
No. of Students	24	1	2	4	2	2

	Number of Years Spent in Work Other Than Teaching					
	0 Years	1 Year	2 Years	3-5 Years	6-10 Years	Over 10
No. of Students	20	1	3	2	4	5

career in library science. Most of the men, 17 to be exact, reported their occupation as student while 8 of them said they had been in military service before entering library school. The only other categories which these men checked were (1) Teaching: 8; (2) Business: 1; and (3) Professional: 1.

Because this study concerned itself with the teaching experience of those from whom data was collected, each person was asked to indicate how many years he had taught, as well as how many years he had worked in jobs other than teaching. Table 2, in setting forth this information, indicates that a total of 11 men had served in full-time teaching positions and 15 students had held full-time jobs in fields other than education. One man in this sample had not only served as a teacher but had worked in another occupation as well; therefore, a total of 25 out of the 35 men in this study had full-time work experience before entering library school. Conversely, less than one out of three had not worked in some full-time capacity before completing this questionnaire.

Of particular interest is the fact that the questionnaire indicated none of the men claimed any professional experience in libraries before participating in this study. While nine did claim experience in a sub-professional capacity, 26 stated they had acquired no work experience of any kind in a library. Finally, question number 10 brought out that 19 of the men wanted to work in college or university libraries upon completion of their degree. This is far more than the number who expressed a preference for other types of libraries, the exact breakdown being, (1) Special Libraries: 8; (2) Public Libraries: 5; and (3) Public School Libraries: 3.

With this background in mind, greater appreciation can be gained from Table 3 and the accompanying profile in Figure 1. The data in these pre-

TABLE 3

SUMMARY OF MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARES MALE LIBRARY STUDENTS TO COMPOSITE DATA FROM CPI MANUAL

	Manual Without College Students N= 1,865[1]		Male Library Students N=35		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	30.47	5.61	28.94	5.96	1.53	1.59
Cs	21.73	3.75	20.20	5.36	1.53	2.37*
So	26.30	4.72	24.31	5.36	1.99	2.46*
Sp	37.99	5.66	35.94	7.62	2.05	2.11*
Sa	22.25	3.79	22.05	3.97	.20	.30
Wb	38.67	3.70	36.88	5.44	1.79	2.80**
Re	32.12	4.38	29.94	5.24	2.18	2.90**
So	36.65	4.73	34.80	6.00	1.85	2.28*
Sc	30.91	6.91	27.54	6.85	3.37	2.85**
To	24.70	4.35	22.74	5.94	1.96	2.62**
Gi	19.07	6.17	17.02	5.25	2.05	1.94
Cm	26.12	1.70	24.60	3.42	1.52	5.11**
Ac	29.53	4.21	27.57	5.12	1.96	2.72**
Ai	21.79	4.60	20.82	5.68	.97	1.22
Ie	41.46	4.86	39.54	6.58	1.92	2.29*
Py	13.08	3.09	11.60	3.86	1.48	2.79**
Fx	10.61	4.56	9.74	4.04	.87	1.12
Fe	16.53	3.81	18.17	3.03	1.64	2.52*

[1] p.34 of CPI Manual: 14 occupational groups

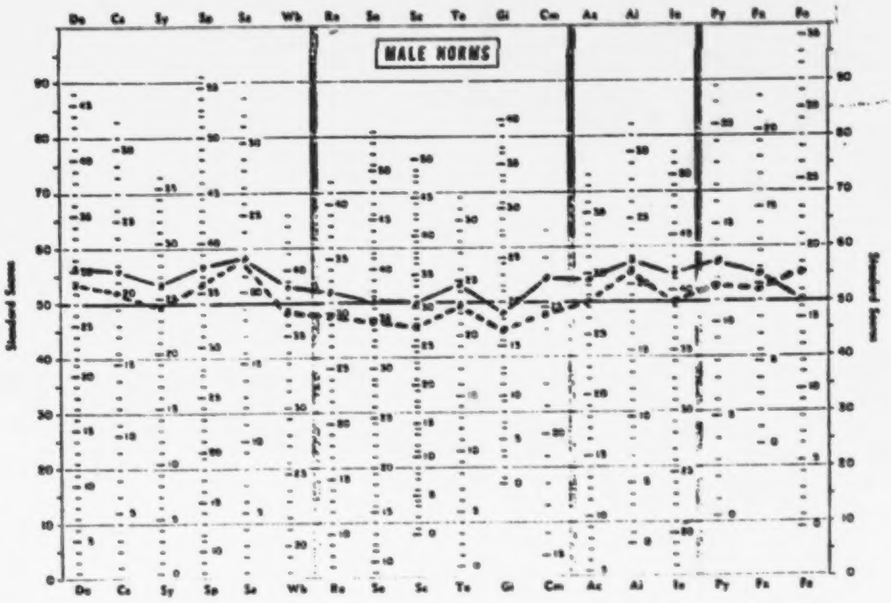
*p < .05

**p < .01

sentations were derived by computing the means of all 18 CPI scales generated by the 35 men in this study. It is well-known, of course, that there is no such thing as an average person, and certainly there is no such thing as an average personality. Therefore, the composite which appears in Figure 1 is not meant to portray the average male student who wants to be a librarian; on the contrary, its significance lies in the fact that this group of students generated these particular means, and as a potential occupational sample they compare to other

FIGURE 1

COMPOSITE PROFILES GENERATED FROM MEAN SCORES OF 35 MALE LIBRARY STUDENTS AND 14 OCCUPATIONAL GROUPS AS PRESENTED IN CPI MANUAL



	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe
Manual Data	30	21	26	37	22	38	32	36	30	24	19	26	29	21	41	13	10	16
Library St.	28	20	24	35	22	36	29	34	27	22	17	24	27	20	39	11	9	18

Male Norms

identifiable groups in certain quantitative ways. On page 34 of the Inventory Manual (1), for example, is a series of tables, each containing means and standard deviations on CPI scales which have been produced by various occupational groups. If one excludes those groups which by common consent are clearly different from librarians, i.e., psychiatric hospital patients, high school disciplinary problems, young delinquents, prison inmates, high school students, and college students, a composite profile can be obtained on the remaining fourteen occupations, and this profile can then be compared to that of the 35 male library students. As a matter of record, the standard deviations for this composite were derived by using Ferguson's formula which combines N number of sigmas into a single standard deviation. (1:61)

From the graph in Figure 1 it can be seen that the 35 male library students have a lower mean score on every scale except Femininity. It may be asked why the data listed on p. 34 of the CPI Manual pertaining to college students was omitted from this calculation. The answer is that many of these data were gathered from lower division students who would be significantly younger than the graduate students making up this library science sample. The CPI does reflect an age factor and when younger examinees are included in adult samples the net effect is to lower the several mean scores. This circumstance was demonstrated when the Manual's 1,133 college students were subsequently added to the 14 occupational groups of Table 1 and a second tabulation was compiled. In this instance, the predictable did happen in that the overall profile was indeed depressed. In short, then, the librarians of this study are compared in the above figure to adult samples, and this adumbration shows that the composite of 14 occupations registers scores which are significantly higher than librarians on 12 of the 18 scales, with 7 of these differences beyond a 1 percent probability of error.

At this point caution should militate against an over-enthusiastic interpretation of these findings. The author of the California Psychological Inventory, Dr. Harrison Gough, University of California, advises that such compilations should neither be considered a national sample nor tantamount to data that can be interpreted as norms. Nevertheless, some psychologists and statisticians would contend that importance should be attached to the fact that this sample of library students scored below the composite on 17 out of 18 scales, even though 5 of these differences are not statistically significant.

But however chary one might be of this composite profile, it is meaningful that the one scale on which librarians did score higher was Femininity. In discussing this scale, one should be careful to understand its more subtle meanings, since the term "femininity" does not have the same connotations for CPI clinicians that it does for laymen. The Inventory Manual, for example, characterizes high scorers as being helpful, accepting of others, gentle, patient, respectful, and conscientious in a sympathetic way. Obviously, such adjectives are not what comes to mind when most people hear the word femininity; but, while these definitions may vary from the commonly understood meaning of the term, they nevertheless do carry certain inferences which many associate with a stereotyped image of male librarians.

But the most crucial element concerning the Femininity scale is found in its underlying theme. The fundamental purpose of this scale is to define personality variables which range from such characterizations as initiative, decision making, and assertion at one end to conservation, maintenance, and restoration at the other. For convenience, these poles may be labeled "masculine" and "feminine" as long as it is remembered that the masculinity pole concerns itself with action and change whereas the femininity pole is synonymous with stability and nurturance. These concepts in personality analysis are not necessarily identical to the clinician's interest in sexual disturbance and deviations; and, in fact, sexual normality is ordinarily to be expected whether a given individual scores high or low on the scale.

In considering the scores which these men registered on the Femininity scale, one first notices that these 35 subjects attained a higher mean on Fe than either the 115 women participants or a large group of male respondents who took part in an international study (4). Such a phenomenon came about because only 10 of the 35 men had a standard score that was below 50 and of these ten, 2 were as high as 49 and three showed a score of 47. In Gough's cross-cultural study of the Femininity scale mentioned above, he examined a sample of 6,419 American men in which it was discovered that their mean score was 16.26, with standard deviation of 3.63. This circumstance means that the present group of librarians, with their average of 18.17 and standard deviation of 2.95, have scores which are significantly higher than those in Gough's more unselected sample. The following distribution graphically illustrates this difference by showing how the two arrays compare with one another.

TABLE 4

DISTRIBUTION OF SCORES ON FEMININITY SCALE COMPARING MALE LIBRARY STUDENTS TO AN UNSELECTED SAMPLE OF AMERICAN MEN

Male Library Students N = 35			American Male Norms N = 6,419	
Fe Score	No. of Men		Fe Score	No. of Men
			33	1
			29	3
			28	6
			27	12
			26	21
25	1		25	45
			24	65
23	1		23	104
22	2		22	184
21	3		21	304
20	5		20	437
19	6		19	544
18	4	----- $\bar{X}$	18	672
17	3		17	657
16	2	$\bar{X}$ -------	16	694
15	3		15	667
14	3		14	574
13	1		13	450
			12	353
12	1		11	245
			10	183
			9	108
			8	59
			7	19
			6	6
			5	7
X = 18.171	S.D. = 2.95		$\bar{X}$ = 16.265	S.D. = 3.63
Median = 18.5			Median = 16	
Mode = 19			Mode = 16	

Table 4 shows that among the librarians, 65.7 percent fall between a score of 16 and 21, inclusive, while Gough's men have a comparable percentage between 13-19. Furthermore, the mode for these library students is 19 and the median score is 18.5, both of which are considerably higher than that found among the 6,419 American men. Finally, since this table shows that very few of the library students have scores which approach the first standard deviation below the mean--scores that are indicative of persons who are manipulative, opportunistic, hard-headed, impatient with delay, and in general oriented toward action and change --another bit of evidence is accumulated to show that these 35 men tend strongly to project the stereotyped image that is discussed above.

When this combined amount of information is used to interpret the profile in Figure 1, a rather clear picture emerges. The 35 male library students are not as forceful, ambitious, and poised as the composite of 14 occupations; yet, the library students have scores on the first six scales that show them to be at least average in ascendency and self-acceptance. The second cluster of six scales, however, indicates that these men are consistently below the profile's mid-point, a circumstance which probably shows that as a group they are less perceptive, organized, and patient with society's expectations. The three scales relating to achievement show a peak on the Achievement via Independence with average scores on both Achievement via Conformity and Intellectual Efficiency. Although such patterns are often found among graduate student samples, the combination of a high on Achievement via Independence and a generally low elevation throughout the second set of six scales suggests that these men perform best when working alone.

Through an item analysis of all 480 questions in the Inventory, it is possible to draw even more conclusions about the nature of this group. By examining those questions which more of these library students answered true than would statistically be expected, certain meanings begin to appear that take on the characteristics of an occupational syndrome. In analyzing test questions in such a manner, it is first necessary to know the percentage of "true" responses which can be expected from unselected samples and, on the basis of such a percentage, select a cut-off point so that all items which exceed this point can be partialled out for study. In this case, the test author at the University of California has established such percentage norms for each question in the Inventory, and for purposes of this investigation a cut-off point of 25 percent above these norms was arbitrarily established. In other words, if established norms indicated that 48 percent of all unselected samples answered a given question true, that Inventory item would have to be answered by at least 73 percent of the library students before it could be used in this analysis. Listed below are those items which were identified by using this technique; and, for clarity, the actual percentage of librarians answering true, plus the percentage of expected affirmative answers, are included in the brackets.

Question No.	Text of the Question	(Librarian -- Norm Percent)
122	I like poetry.	(80-41)
124	I am likely not to speak to people until they speak to me.	(34-6)
140	I enjoy hearing lectures on world affairs.	(91-60)
204	I like to plan a home study schedule and then follow it.	(68-34)
207	Sometimes at elections I vote for men about whom I know very little.	(80-52)
217	I think I would like the work of a librarian.	(97-13)
222	I would like to belong to a discussion and study club.	(77-42)
246	I like to plan out my activities in advance.	(88-22)
268	At times I have been very anxious to get away from my family.	(80-55)
285	I refuse to play some games because I am not good at them.	(68-33)
396	I sometimes wanted to run away from home.	(68-44)

Equally pertinent are those questions that 25 percent fewer library students answered true. In the same manner as before, the following list of items shows the question number as it appears in the Inventory, the percentage of male students who marked it true, and the percentage of true answers that should be expected on the basis of established norms.

Question No.	Text of the Question	(Librarian -- Norm Percent)
18	A person who doesn't vote is not a good citizen.	(37-66)
19	I think I would like the work of a building contractor.	(14-44)
41	For most questions there is just one right answer, once a person is able to get all the facts.	(26-56)
82	I think I would like the work of a garage mechanic.	(11-37)
155	A person should adapt his ideas and his behavior to the group that happens to be with him at the time.	(37-62)
189	In school my marks in deportment were quite regularly bad.	(6-34)
241	The man who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it.	(34-59)
249	I like mechanics magazines.	(34-72)
255	Only a fool would try to change our American way of life.	(28-64)
263	Lawbreakers are almost always caught and punished.	(37-63)
367	My home life was always very pleasant.	(37-62)
382	Success is a matter of will power.	(40-66)
416	I don't think I'm quite as happy as others seem to be.	(17-42)

TABLE 5

MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARE 35 MALE LIBRARY STUDENTS
TO DATA ON 85 SALESMEN PRESENTED
IN CPI MANUAL

Scale	Male Library Students N-35		Salesmen in CPI Manual N-85		Statistic	
	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	32.0	4.7	3.1	3.03**
Cs	20.2	5.2	21.1	3.3	.9	1.12
Sy	24.3	5.2	28.0	3.8	3.7	4.29**
Sp	35.9	7.4	38.2	4.5	2.3	2.06*
Sa	22.0	3.9	23.2	2.4	1.2	2.03*
Wb	36.8	5.3	39.8	3.0	3.0	3.75**
Re	29.9	5.1	31.6	4.4	1.7	1.81*
So	34.8	5.8	39.3	4.4	3.5	3.56**
Sc	27.5	6.6	32.0	6.2	4.5	3.51**
To	22.7	5.8	24.1	4.1	1.4	1.48
Gi	17.0	5.1	20.7	5.6	3.7	3.34**
Cm	24.6	3.3	27.1	1.1	2.5	6.14**
Ac	27.5	4.9	30.1	4.0	2.6	2.88**
Ai	20.8	5.5	17.9	3.6	-2.9	3.37**
Ie	39.5	6.4	40.3	4.3	.8	.78
Py	11.6	3.8	12.1	2.4	- .5	.85
Fx	9.7	3.8	6.9	3.1	2.8	4.20**
Fe	18.1	3.0	16.3	3.1	1.8	3.08**

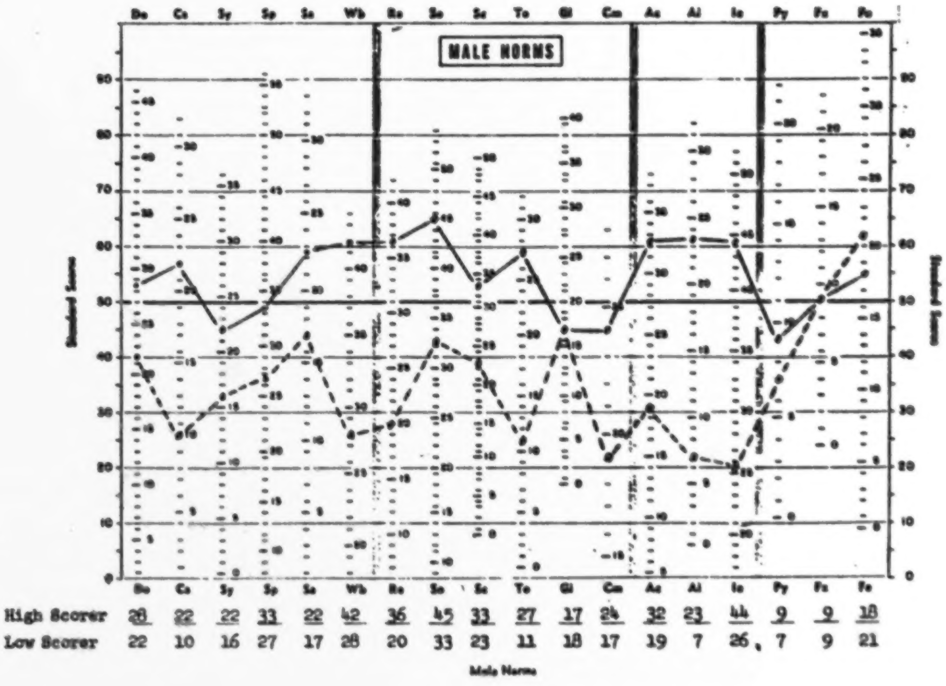
*p .05 @ d.f. = 118
**p .01

Several writers have long contended that personality characteristics do play a large roll in determining who enters various occupations. Goldschmid (5), for example, concluded that from the data he gathered it was clear that particular personality patterns are associated with major fields of study which students pursue in college. Table 5 in presenting data on one occupational group from the CPI Manual and contrasting its mean scores to those of the male librarians in this study, would seem to confirm such a conclusion. From this table, as well as from those in the Appendix, student "t" tests indicate that salesmen, social work graduate students, research scientists, psychiatric residents, practicing dentists, and medical school applicants all score considerably higher on the CPI than do librarians. On the other hand, school superintendents, psychology graduate students, bank managers, and military officers are more in line with mean scores of librarians, though these occupational groups do have significantly higher scores on many scales. Finally, correctional officers, machine operators, architects, and 1st level business executives (e.g., supervisors), all have mean scores which are comparable, or perhaps slightly lower, to those of librarians.

Such comparisons are always interesting, and perhaps even have a certain descriptive importance, but actually they prove very little. Few psychologists would expect successful salesmen to have personality characteristics identical to successful librarians. It may be, in fact, that a librarian endowed with traits commonly associated with a gifted salesman would be quite unsuccessful in his chosen work. The fact, then,

FIGURE 2

PROFILES OF TWO MALE LIBRARY STUDENTS WHO
MANIFEST CONTRASTING PERSONALITY
CHARACTERISTICS



	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe
High Scorer	28	22	22	33	22	42	36	45	33	27	17	24	32	23	44	9	9	18
Low Scorer	22	10	16	27	17	28	20	33	23	11	18	17	19	7	26	7	9	21

that one group of occupations should score below or above another is only of passing interest. Of much more importance is the identification of characteristics within an occupational group, and the discovery of patterns relative to the manner in which these intra-group differences manifest themselves.

To reduce a personality by means of a paper-and-pencil test is, of course, hazardous--not even the most experienced clinician would claim 100 percent predictability. In dealing with profile sheets such as those that accompany the CPI, one must have long experience and first-hand knowledge of its subtleties if even a considered analysis is to be made. While such a reading is obviously beyond the exigencies of this report, understanding may be gained of the participants in this investigation if two widely contrasting personalities are briefly described. Accordingly, Figure 2 shows the profile of two such individuals--one who is apparently well-adjusted and capable of operating in an effective manner, and the other a person who not only is in conflict with his environment but is performing poorly in relation to most norms that have been developed for this test.

In Chapter I, mention was made that the CPI is divided into four parts. The first of these parts is devoted to six scales which indicate whether a person has qualities generally associated with leadership, poise, and a wholesome perception of himself. While qualities such as these are typically thought to be of far-reaching concern, the CPI still recognizes that it is also important for a person to channel his ambitions and spontaneity into socially acceptable patterns of behavior; therefore, the Responsibility and Socialization scales were constructed to provide a measure of individual achievement and effectiveness in dealing with people, especially where self-discipline, adherence to values, and the management of impulse are important.

In addition, the Good Impression scale acts as a balance to high scores on Responsibility and Socialization. In carrying out this function, Good Impression helps to identify persons who are pre-occupied with convention for its own sake, and for this reason, the CPI is especially appropriate in pointing out characteristics of sensitivity and acceptance of social values among those who retain their individuality. Finally, the two scales dealing with Achievement via Conformity and Independence, plus the one labeled Intellectual Efficiency, show the academic orientation of a person, and when balanced against Good Impression and Self-Control, they have good predictability in pointing up an adaptable, goal-oriented person.

With this abbreviated review in mind, it is easy to see why the profile occupying the bottom half of Figure 2 is indicative of a person who is badly in need of help. Information from the questionnaire indicates he is between 23 and 25 years of age, married and dissatisfied with life as a student. From both the elevation and the contour of his profile it is fairly certain that this student makes little impact on people, for the first six scales indicate he has neither ambition nor energy, and that various inhibitions have left him with minimum ability to assert himself in unfamiliar situations. Furthermore, the low score on Re indicates that he has not fully incorporated the usual rules of society into all his thinking, and because of this he probably has become quite impulsive. He has little regard for academic values and it is likely that he bases so much of his thinking on biased attitudes that he rarely has enough sensitivity to worry about those social values which distinguish high achievers.

In contrast to this is a male student between 26 and 30, single, and with a brighter outlook on matters which effect him. While he does not present himself as being overly aggressive or independent, this profile does show him to be resourceful and self-assured, yet not so bound to the rules of his culture that he is constricted in outlook. Moreover, his achievement potential as shown in Ac, Ai, and Ie, appear to be high, and when these attributes are matched to his socialization and self-control score he comes through a competent person who is adaptable and goal-oriented. In conclusion, his score on the communality scale probably indicates an independent spirit which doesn't always conform to the crowd.

Needless to say, everyone does not fit these types, for there are infinite combinations among the scales. But while complexities are the rule in deciphering personality profiles, a perusal of scores for each of the 35 men in this study, as well as an examination of accumulated data such as that found in Table 3, indicates these library students do present certain characteristics that are distinctively their own. The problem of this investigation, then, becomes one of discovering syndromes and configurations within sub-groups that the questionnaire will supply. Are there, for example, apparent differences among those who have been dissatisfied with previous jobs; or, do certain identifiable groups of students have expectations from librarianship that are reflected in personality traits which can be measured by the California Psychological Inventory?

It has already been pointed out in Table 2 how the men of this study spent their adult lives in full-time jobs. Because five out of seven men in this investigation had worked at some other occupation before entering library school, one might ask why these men desired to make a change in their manner of livelihood. While such a question is beyond the scope of this study, it is possible to determine on the basis of available data whether groups of men who had spent varying amounts of time in occupations other than library work manifest certain characteristics which the CPI delineates.

Table 6 presents inventory means and standard deviations for those men who had never held full-time positions prior to this study, as well as for 13 other men who at that time had worked at least six years. Unfortunately, it was impossible to divide this sample further because of the small size; however, Table 6 does indicate that those with work experience tend to have higher scores on the first six scales--poise, ascendency, and self-assurance--while those men who had not worked tend

TABLE 6

MEANS, STANDARD DEVIATIONS, AND "t" [illegible] ON
MALE LIBRARY STUDENTS WITH SETA
BY NUMBER OF YEARS WORKED

No. of Years Worked	No Work Experience N-10		Worked at Least 6 Years N-13		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.30	4.37	31.30	6.81	3.00	1.15
Cs	19.70	6.23	21.46	3.97	1.76	.81
So	25.10	5.62	25.00	4.70	.10	.04
Sp	34.00	6.69	38.07	6.55	4.07	1.41
Sa	21.30	2.98	23.38	3.33	2.08	1.52
Wb	37.30	6.94	37.00	5.47	.30	.11
Re	30.10	6.47	29.84	4.82	.26	.12
So	36.90	5.80	33.30	4.93	3.60	1.54
Sc	28.90	6.24	25.23	8.88	3.67	1.07
To	23.10	7.59	23.30	5.03	.20	.07
Gi	18.40	4.47	15.07	6.47	3.33	1.31
Cm	24.00	3.36	26.00	2.12	2.00	1.65
Ac	28.00	6.83	26.15	4.74	1.85	.75
Ai	21.10	8.22	21.00	4.33	.10	.03
Ie	39.50	7.87	39.53	5.01	.03	.00
Py	11.10	5.04	11.23	2.94	.13	.05
Fx	9.40	5.50	10.00	2.82	.60	.32
Fe	18.70	2.21	18.00	2.58	.70	.65

*p <.05 Significance @ .05 when d.f. = 21 is 1.721

to score higher on the second six scales, i.e., measures of socialization, maturity, and responsibility. There appear to be no significant differences on the last six scales, or that part of the test relating to academic achievement potential and interest modes.

Another element that was important in the questionnaire was the degree of satisfaction which each participant in this investigation derived from his occupation before entering library school. Each student was asked to check a 10-point rating scale that was intended to represent a satisfaction and "10" indicative of maximum satisfaction. It was presumed that persons would be less interested in changing vocations if they were completely satisfied with the work they were doing; furthermore, it was hypothesized that if they expressed varying amounts of dissatisfaction there might be significant correlation between such ratings and scores derived from the Inventory.

Table 7 presents data on how these 35 men checked the Satisfaction rating scale. Fifteen of the 35 men reported a high level of satisfaction with their former work, they having checked either 8, 9, or 10. Fourteen men made self-ratings that placed them in the range of 5 to 7, while a total of six indicated they felt so little satisfaction with former work that they felt inclined to mark either 2, 3, or 4. This means that eleven out of 35 men, or almost one in three, marked this scale at a point no higher than 5--all of which raises a most important question, viz., how do the 18 CPI scores which these men generated compare when the 35 subjects are categorized according to self-ratings on this Satisfaction Scale.

TABLE 7

DISTRIBUTION OF SELF-RANKINGS INDICATIVE OF SATISFACTION WHICH 35 MALE STUDENTS REALIZED FROM FULL-TIME WORK PRIOR TO ENTERING LIBRARY SCHOOL

Scale	Satisfying				SATISFACTION			Highly Satisfying		
	1	2	3	4	5	6	7	8	9	10
No. of Students		1	4	1	5	3	6	5	7	3

Table 8 shows means and standard deviations for those male students who rated their former job satisfaction between 2-4 and 5-7, inclusive. Such classifications were not based solely on arbitrary considerations, for it was originally felt that a logical separation of these categories could be structured by standard deviations. The mean score on this Satisfaction scale was 6.742 with a standard deviation of 2.292; therefore, a division similar to the one outlined above seemed equitable both from

TABLE 8

MEANS, STANDARD DEVIATIONS, AND "t" SCORES ON 18 CPI SCALES PROFILING MALE LIBRARY STUDENTS WHEN ARRANGED BY SELF-RANKINGS ON SATISFACTION SCALE

Satisfaction Rank	2-4 N-6		5-7 N-14		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	25.6	6.15	29.3	6.10	3.7	1.17
Cs	17.0	6.32	21.3	5.94	4.3	1.38
Sy	20.5	5.92	25.1	6.18	4.6	1.46
Sp	30.6	11.67	37.6	6.68	7.0	1.74*
Sa	19.2	3.43	23.0	3.57	3.8	2.08*
Wb	32.7	6.37	38.8	4.17	6.1	2.38*
Re	24.5	2.25	31.8	4.35	7.3	3.66**
So	33.3	3.88	36.3	5.60	3.0	1.13
Sc	23.7	4.45	27.7	7.31	4.0	1.18
To	17.7	5.42	24.6	5.63	6.9	2.42*
Gi	15.7	5.35	16.5	4.70	.8	.36
Cm	22.2	3.54	25.9	1.54	3.7	3.13**
Ac	24.8	4.62	28.7	5.25	3.9	1.50
Ai	16.7	7.39	23.0	5.06	6.3	2.09*
Ie	37.0	7.53	41.1	6.44	4.1	1.18
Py	10.7	4.03	11.6	4.74	.9	.38
Fx	9.5	4.64	11.2	4.04	1.7	.77
Fe	20.3	1.36	18.5	3.20	1.8	1.25

*p <.05 d.f. = 18
**p <.01

the theoretical standpoint as well as from the practical necessity of contriving a table which would include samples big enough to be meaningful.

Although Table 8 does not show data for the "8-10" group, it should be pointed out that men who comprised this classification had means and standard deviations which were almost identical to the "5-7" group. From this tabulation one can see that students labeled "2-4," a group comprised of six subjects, have lower scores on all but one of the 18 scales, 7 of which are significant at $p < .05$. Therefore, just as was the case in Table 3, the direction of these differences becomes a matter that could excite considerable speculation, for in terms of statistical probability, they could hardly have happened by chance; moreover, this circumstance takes on even added importance when it is noted that the only place which shows a higher mean score for the dissatisfied group is on the Femininity scale.

When self-ratings on this satisfaction continuum were correlated with scores on each of the 18 CPI scales, it was discovered that significant rho's appeared only on Sociability, Responsibility, Self-Acceptance, and Social Presence, with an inverse correlation on Femininity. The last named is particularly noteworthy for it indicates that high scorers on Femininity tended to be low scorers on Satisfaction and vice versa. These correlation tests would also suggest that low self-raters on satisfaction are more likely to be men who are characterized as conservative, moderate, patient, and influenced by others; if such is the case, men in this sample who expressed low job-satisfaction may have felt that librarianship would offer a more congenial atmosphere as well as a setting where they could more adequately realize themselves.

To be satisfied in one's work presupposes that the respondent has once had a full-time position, else there would be no basis for forming an opinion on former job satisfaction. While the preceding discussion did include data from students who indicated they had not held full-time positions, this apparent contradiction can be accounted for by the fact that the questionnaire was structured so these persons could indicate the degree of satisfaction they experienced as students. Yet, without discounting the importance of a satisfactory experience in the role of student as a condition for success in librarianship, it is still doubtful whether this generates the same reaction as does a full-time, self-supporting job. Therefore, the ten students who indicated they had no work experience were dropped from the sample, and data from the remaining 25 men were correlated. The coefficients which appear in the right hand column of Table 9 show the results of such tests.

TABLE 9

SUMMARY OF COEFFICIENTS WHICH SHOW CORRELATIONS
BETWEEN RATINGS ON JOB SATISFACTION AND 18
SCALES OF THE CPI AS GENERATED BY ALL
MALE STUDENTS AND BY 25 STUDENTS
WITH WORK EXPERIENCE

Scale	All Male Students N-35	Male Students With Work Experience N-25
Do	.225	.250
Cs	.242	.151
Sy	.317*	.233
Sp	.287*	.193
Sa	.316*	.211
Wb	.188	.273
Re	[illegible]	.289
So	[illegible]	.037
Sc	[illegible]	.274
To	.270	.299
Gi	.097	.368*
Cm	.126	-.050
Ac	.137	.222
Ai	.184	.069
Ie	.126	.095
Py	.186	.087
Fx	-.058	-.245
Fe	-.387*	-.373*

*p <.05

From this comparison it is evident that fewer statistically significant correlations are present when library students without work experience are not considered. But the effect of parcelling out students who had not worked was just the opposite when correlations were taken between the number of years these men had worked (c.f., Table 2) and the satisfaction they derived from such work. For example, when all 35 men were considered, the correlation between number of years worked and self-ratings on the Satisfaction scale stood at only .007, or virtually no association. However, when men without work experience were omitted from the sample this coefficient became -.271, and while such a statistic falls short of being significant at 5 per cent, it is the first indication of a trend that will be seen throughout this report which suggests that the more years these librarians worked the smaller was their indication of satisfaction derived from such work.

As a final observation, each man's indication of satisfaction with former work was correlated with the specially contrived composite achievement score that was discussed in Chapter 1. When all 35 librarians were tested by the Pearson product, a correlation coefficient of .178 was produced, and when only the 25 men with full-time work experience were similarly examined this figure rose no higher than .187. Because neither of these rho's is statistically significant, the evidence seemed insufficient to conclude that this common measure of such traits as capability, efficiency, cautiousness, and intellectual propensity was associated with whatever job satisfaction these men experienced before they entered library school.

Expectation Scale

In contrast to the satisfaction continuum, a second rating scale was included in the questionnaire that was intended to indicate how much personal satisfaction the respondents believed future library work would give them, especially in relation to previous occupations. From Table 10 it is apparent that most of the 35 men participating in this investigation felt they would enjoy the work of a librarian. Twenty-four of the 35 librarians marked this scale at a point no lower than 8, while only three out of 35 expected so little satisfaction from librarianship they rated themselves no higher than 5. Such ratings should probably not be surprising, for surely a person expects to derive considerable satisfaction from an occupation that requires advanced academic degrees or he would not go to the expense in time, money, and nervous energy necessary to win such credentials.

TABLE 10

DISTRIBUTION OF SELF-RANKINGS INDICATIVE OF
SATISFACTION WHICH 35 MALE STUDENTS EXPECT
TO RECEIVE FROM PROFESSIONAL LIBRARY
POSITIONS

Scale	Unsatisfying				EXPECTATION			Highly Satisfying		
	1	2	3	4	5	6	7	8	9	10
No. of Students		2			1	4	4	9	8	7

This Expectation Scale, as it will hereafter be called, proved to be unusually important in the work of this investigation. Table 11, for example, presents means and standard deviations on CPI scores for the 35 men when they were separated by the manner in which they rated themselves on the Expectation Scale. From these three groups of data it is apparent that on virtually every scale the means grow larger as one progresses from "2-6," to "7-8," and "9-10." The biggest drawback to this

TABLE 11

MEANS, STANDARD DEVIATIONS, AND F SCORES ON 18 CPI SCALES PROFILING MALE LIBRARY STUDENTS WHEN ARRANGED BY SELF-RANKINGS ON EXPECTATION SCALE

Expectation	2-6 N-7		7-8 N-13		9-10 N-15		Analysis of Variance
Scale	Means	S.D.	Means	S.D.	Means	S.D.	F Score
Do	27.57	4.39	28.07	5.79	30.33	6.56	.74
Cs	17.71	5.18	19.15	6.18	22.26	3.86	2.34
So	21.14	4.29	24.00	5.53	26.06	5.03	2.25
Sp	33.14	8.64	35.38	7.97	37.73	6.54	.94
Sa	20.00	3.82	21.53	3.90	23.46	3.66	2.19
Wb	32.71	4.27	36.46	7.10	39.20	2.07	4.22*
Re	25.00	2.88	30.15	6.01	32.06	3.65	5.70**
So	29.28	4.34	35.30	6.08	36.93	4.99	5.01*
Sc	25.28	2.13	27.76	9.50	28.40	5.28	.50
To	18.14	4.77	22.84	7.09	24.80	3.93	3.54*
Gi	18.14	5.11	16.30	6.96	17.13	3.35	.27
Cm	21.42	5.12	25.38	2.53	25.40	2.16	4.68*
Ac	24.57	4.42	26.92	6.37	29.53	3.11	2.72
Ai	16.71	5.82	21.30	6.68	22.33	3.51	2.72
Ie	34.57	6.26	39.30	7.97	42.06	3.43	3.70*
Py	10.85	3.97	11.15	4.63	12.33	3.01	.48
Fx	8.85	5.33	9.84	4.27	10.06	3.19	.21
Fe	19.14	2.47	18.92	2.92	17.06	3.08	1.89

*$p < .05$
**$p < .01$; d.f. = 2 & 32

table is that the various samples are so small; however, an analysis of variance test on each of the 18 scales reveals that one F score is significant beyond .01 probability of error and five others have differences beyond 5 percent.

Because examination of this table indicated further internal differences, Table 12 was constructed to show how students who were least optimistic about library work, i.e., group 2-6, would compare to those who were expecting substantial satisfaction from a library position--or group 9-10. As this table points out, those who indicated they expected much satisfaction from library work have means which statistically exceed those with little expectation on 11 out of 18 scales. In absolute terms, those men with a more optimistic view of their prospects in library work not only scored higher on all measures pertaining to poise, ascendency, and achievement, but they also had higher means on most scales relating to maturity and social responsibility. And even though scores on Dominance, Psychological Mindedness, and Flexibility were statistically insignificant, such a matter is of less importance because the direction of these differences favor students with high expectation on 16 out of 18 scales, or many more times than could be expected purely by chance. Finally, the results on Femininity should again be noted with care since it is one of only two scales in which those with little expectation scored above those with high expectation.

It would appear, then, that students who rate themselves low on the Expectation scale also score low as a group on given CPI scales, just as those who have low ratings on the satisfaction scale also tend to have

TABLE 12

MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARE MALE LIBRARY STUDENTS
WHO RATED THEMSELVES AT OPPOSITE
ENDS OF EXPECTATION SCALE

Expectation	2-6 N-7		9-10 N-15		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	27.57	4.39	30.33	6.56	2.76	.93
Cs	17.71	5.18	22.26	3.86	4.55	2.19*
So	21.14	4.29	26.06	5.03	4.92	2.17*
Sp	33.14	4.59	37.73	6.54	4.59	1.32
Sa	20.00	3.82	23.46	3.66	3.46	1.95*
Wb	32.71	4.27	39.20	2.07	6.49	4.54**
Re	25.00	7.88	32.06	3.65	7.06	4.35**
So	29.28	4.34	36.93	4.99	7.65	3.35**
Sc	25.28	2.13	28.40	5.28	3.12	1.42
To	18.14	4.71	24.80	3.93	6.66	3.31**
Gi	18.14	5.11	17.13	3.35	1.01	.51
Cm	21.42	5.12	25.40	2.16	3.98	2.44**
Ac	24.57	4.42	29.58	3.11	5.11	2.86**
Ai	16.71	5.82	22.33	3.51	5.62	2.67**
Ie	34.57	6.26	42.06	3.43	7.49	3.44**
Py	10.85	3.97	12.33	3.01	1.48	.94
Fx	8.85	5.33	10.06	3.19	1.21	.67
Fe	19.14	2.47	17.06	3.08	2.08	1.42

*p <.05 ; d.f. = 20
**p <.01

low CPI scores. This, in itself, however, does not necessarily mean that the same students are the ones who are scoring low on both criteria. Therefore, to discover whether this might actually be the case, a correlation test was structured to determine whether low scorers on the Satisfaction scale tended also to score low on the Expectation scale, and vice versa. Upon correlating all 35 men in such a test, a rho of .297 --significant at .05 but not at .01--was found to exist. An interesting feature of such a finding is that although 32 of these 35 men marked the Expectation scale no lower than 6, thus generating a mode which was considerably higher than that found on the Satisfaction scale, there apparently was an association between those who marked the Expectation scale at 5, 6, and 7; and those who made self-ratings of 2, 3, and 4 on the Satisfaction scale.

It was noted earlier that when the 35 men of this study had their Satisfaction scale ratings tested for association with each of the 18 CPI scales, statistical correlations on a limited number of scales were apparent. Table 13 shows that when this same test was applied to ratings from the Expectation scale, significant correlations could be found on 12 of the 18 scales.

The Expectation scale also proved to be of use when its ratings were correlated with composite achievement scores. It will be remembered that a correlation of approximately .18 was found to exist when composite achievement was tested for association with satisfaction; but, unlike that instance, a rho as large as .418 ($p <.01$) was found to exist between achievement and Expectation ratings. Such a finding gives evidence

TABLE 13

SUMMARY OF COEFFICIENTS WHICH SHOW CORRELATIONS BETWEEN SELF-RATINGS ON EXPECTATION SCALE AND 18 SCALES OF THE CPI AS GENERATED BY 35 MALE LIBRARY STUDENTS

CPI Scale	rho	CPI Scale	rho	CPI Scale	rho
Do	.211	Re	.450**	Ac	.386*
Cs	.358*	So	.404**	Ai Ie	.364* .381*
Sy	.387*	Sc	.195		
Sp	.333*	To	.425**		
Sa	.319*	Gi	-.022	Py Fx	.273 .245
Wb	.441**	Cm	.325*	Fe	-.182

*$p < .05$
**$p < .01$

that those who expected to derive the greatest satisfaction upon entering library work were also the ones who scored highest on this particular measure of academic inclination. In the same way, those men who had a low expectation concerning what library work offers are also the ones who scored low on the composite.

It was pointed out in a previous paragraph that when only library students who had held full-time jobs were studied, an inverse correlation of considerable magnitude--even though statistically insignificant--was found between the number of years worked and the satisfaction they derived from those jobs. When these same 25 men were tested to determine whether a statistical association might exist between the amount of satisfaction they expected from librarianship and the number of years they had taught, an inverse correlation of -.298 was found to exist. Similarly, a rho of -.333 was generated on a test for correlation between the total number of years these men had worked (whether in education or some other field) and their self-rating on the Expectation scale. In testing for significance, -.333 was found to generate a "t" score of 1.693, which, with 23 degrees of freedom, is just short of 1.714, the .05 critical level.

Social Maturity Scale

A large share of this study was devoted to an examination of the 150 library science students by means of a Social Maturity formula which Harrison Gough, author of the CPI, recently developed (3). In working out this formula, Dr. Gough made heavy use of the Socialization scale, the rationale being that such a measure has not only proven to be a valid indicator of how an individual inter-acts within his social milieu, but also because it appears to differentiate occupational groups along a continuum which corresponds rather closely to commonly understood sociological hierarchies. (6:25)

In various writings on the topic, Dr. Gough has stressed that the Socialization scale by itself is intended to measure the degree to which a person has internalized the rules, constraints, and values of his social order. On the other hand, Social maturity goes beyond such a definition for it gives a clue as to how well each person has adapted to these constraints. A person with a high degree of social maturity is not only effective in inter-personal relations, but he is also able to live imaginatively within the confines of his social environment. Moreover, he is not an acquiescing type, for his individuality permits him to recognize and even welcome change.

A valid measure of social maturity would understandably include any scale which could gauge a person's ability to interpret and react to cues within his social sphere. Furthermore, social maturity as defined here should embrace the degree to which social controls are understood, as well as the extent to which a person approves of the regulations under which he lives and works. At the same time, the socially mature person is not a "yes" man, for he rarely has an inclination to respond in a servile and purely favorable manner. Because of such considerations, the social maturity formula is made up of a series of positive and negative loadings, or weights, which emphasize the points just mentioned. It is so constructed that the average score when applied to an unselected sample of males will be 50. To use the formula, one merely multiplies the raw scores of the indicated scales to the constants and performs the necessary addition. The social maturity formula used in this study is:

$$28.062 + .148Do + .334Re + .512So - \\ .317Gi - .274Cm + .227Fx = \text{social maturity score}$$

The inventors of this formula, after first-hand consultation with, and intensive study of, persons who have completed the California Psychological Inventory, concluded that male scorers of 56 or above tend to be honest, dependable, conscientious, and stable persons. On the other hand, men who score about 46 or below are generally found to be erratic, impulsive, and undependable. It is important to point out that this formula has been validated only on men; however, it has been used so widely on women that Dr. Gough has confidence in its applicability to both sexes, though experimental confirmation is not as yet complete.

An overall mean of 50.76 with standard deviation of 3.52 has been found to be dependable when using the social maturity formula. From such a baseline as this, Dr. Gough has discovered that occupational groups consistently align themselves in a manner which conforms to a popular, or social hierarchical perception of job classification. Table 14 presents

TABLE 14

SUMMARY OF OCCUPATIONAL GROUPS RANKED BY MEAN STANDARD SCORES FROM SOCIAL MATURITY FORMULA

Occupational Group	N	Standard Scores	Rank
College and high school counselors	66	57.4	1
Bankers	49	54.9	2
Dentists	47	54.5	3
Industrial research scientists	45	54.5	4
City school administrators	200	54.3	5
Architects	124	54.0	6
Psychiatric aides	180	52.9	7
Business Executives	95	52.2	8
Military Officers	200	50.5	9
Regional sales supervisors	85	49.3	10
Men Librarians	35	48.5	11
Shop foremen	45	47.6	12
Electronic technicians	57	46.3	13
Correctional officers	192	45.1	14
Machinists	105	43.1	15

an array of such occupations, all supplied by Dr. Gough, with the 35 library science students of this study ranked in order of mean standard score. From Table 14 it is clear that dentists, bankers, and industrial research scientists, score significantly higher than shop foremen, machinists, and regional sales supervisors. But of more immediate interest to this study is the fact that of the 15 occupations listed, the 35 librarians occupy position number 11--below regional sales supervisors but above shop foremen. And, perhaps of even greater importance is the finding that the mean score for this sample of librarians is 50.237, or very close to the mean of unselected samples. If one wishes to determine how the librarians' mean of 50.237 compares with any of the occupational groups listed on page 34-35 of the CPI Manual, it is necessary only to multiply the means of the various occupations by the constants in the formula and perform the prescribed addition.

The literature is replete with investigations that have tried to fasten a range of social maturity mean scores to observed samples so that the behavior of various groups could be predicted. High scorers among secondary school samples, for example, have been found to stay in school longer, and socially divergent groups from various countries--such as reformatory inmates--have been found to generate their own distinctive social maturity scores. But, out of all this, one should not conclude that high mean scores and socially desirable characteristics are necessarily synonymous, for such a respected group as creative architects was found to be surprisingly low on the Inventory's socialization scale.

TABLE 15

DISTRIBUTION OF SOCIAL MATURITY SCORES FOR 35 MALE LIBRARY STUDENTS

Social Maturity Score	No. of Students	No. and Percentage of Students by St. D.	
57	1	5	14%
54	4		
53	4	22	63%
52	3		
51	5		
50	3		
49	4		
48	1		
47	2		
46	3	7	23%
45	2		
44	1		
43	1		
41	1	1	

$\bar{X}=50.237$
S.D.=3.66

In reflecting upon this, such a circumstance is really not surprising inasmuch as many occupational groups which are known for originality and for accomplishments that presuppose solitude would quite likely generate a mean score below the norm. This, of course, again raises the question as to what are desirable traits in librarians.

When studying the distribution of social maturity scores which the 35 men of this study generated, a goodness of fit test demonstrated that a normal curve was formed even though some skewing to the left is present. But even if too many library students are on the lower end of this scale, there is still the matter of discovering how these social maturity scores align themselves when distributed according to biographical variables from the questionnaire. On the one hand it is necessary to know whether social maturity mean scores differ when the 35 male library students are grouped by age or by occupation before entering library school; while on the other hand it is important to ascertain if statistically productive variables can be established by categorizing the 35 men on the basis of (1) their Satisfaction and Expectation scale rankings, (2) the number of years they worked in a full-time position and (3) the type of library in which they planned to work after completing their degree.

In the Appendix, Tables 18 through 22 show how the various social maturity means compare when male library students were arranged by these several variables. In every case but one an analysis of variance F score indicated that the differences in means appeared to be the result of mere chance. The one set of data which did show statistical differences among Social Maturity means is presented below in Table 16, a tabulation in which the 35 male library students are arranged by self-rankings on the Expectation scale. It is unfortunate that the number of men in the "2-5" category is so small; however, even when this tiny N is pitted against the larger sub-groups, statistical differences between all three means do present themselves which surpass .01 probability of error. Accordingly, another bit of evidence is available to indicate that the degree of satisfaction which these library students expected from a full-time professional position might be a reasonable predictor of some personality characteristics which these men possessed.

TABLE 16

SOCIAL MATURITY MEANS OF 35 MALE LIBRARY STUDENTS WHEN ARRANGED BY SELF-RANKINGS ON EXPECTATION SCALE

Expectation Ranking	No. of Students	Means
2-5	3	45.833
6-8	17	49.399
9-10	15	52.064

$F=5.469 \quad p < .01$

Because such differences were found among sub-groups derived from self-rankings on the Expectation scale, it became reasonable to ask whether low scores on Social Maturity correlate with low scores on Expectation and vice versa. Accordingly, a correlation coefficient of .568 was produced when these two sets of scores were tested for association; and, for a sample of only 35, such a rho proved to have significance beyond a .005 level of probability. In the face of such findings it is well to remember that correlations between rankings on the Satisfaction and Expectation scales produced a rho of .297, a figure that is significant at .05 but not at .025. Yet, notwithstanding this apparent inter-locking association, a test of correlation between job satisfaction and social maturity produced a rho of only .094, or virtually zero association. On the other hand, two other correlations substantiated a point made earlier in this report, one having to do with the Composite Achievement score and the other in reference to the number of years these men had taught.

TABLE 17

CORRELATION COEFFICIENTS FOR 35 MALE LIBRARY STUDENTS INDICATIVE OF ASSOCIATION BETWEEN SOCIAL MATURITY SCORE AND BIOGRAPHICAL DATA

	Composite Achievement	Expectation Scale	Satisfaction Scale	Age of Student	No. of Years Teaching	No. of Yrs. In Work All Kinds
Social Maturity	.643	.568	.094	-.063	-.188	-.135

r=.280 for significance @ .05

Table 17 shows how all the biographical data which can be measured on a continuous scale correlated with Social Maturity, and in referring to this one should notice that while the composite achievement correlates positively with social maturity, a sizable inverse correlation exists between this latter variable and the number of years these men had taught.

MALE STUDENTS WHO PREFER TO WORK IN COLLEGE LIBRARIES

One of the prime reasons for carrying out this study was to determine whether noticeable personality characteristics were discernible among potential librarians who wished to enter the field of higher education. Table 18 presents means and standard deviations for three groups of men

TABLE 18

MEANS AND STANDARD DEVIATIONS PROFILING MALE LIBRARY STUDENTS WHEN ARRANGED BY TYPE OF LIBRARY IN WHICH THEY PLAN TO WORK

Types of Library / Scale	Special Libraries N-8		College & Univ. N-19		Public Libraries N-5	
	Means	S.D.	Means	S.D.	Means	S.D.
Do	32.62	5.40	27.94	4.49	27.40	7.28
Cs	21.62	4.87	19.89	5.34	19.20	5.74
Sy	26.50	3.53	23.73	5.44	23.20	6.67
Sp	39.50	5.17	34.47	8.22	33.80	6.43
Sa	23.37	3.53	21.63	3.98	21.60	3.87
Wb	36.37	6.08	36.57	5.25	37.40	5.19
Re	30.00	5.91	30.26	4.89	29.40	5.74
So	32.75	6.27	35.31	6.28	35.20	1.59
Sc	27.75	9.87	27.63	5.80	26.20	2.99
To	22.50	5.89	22.42	5.67	22.20	6.79
Gi	18.75	6.81	17.00	4.67	16.80	2.31
Cm	24.62	2.59	24.57	3.52	23.00	3.52
Ac	26.75	5.21	27.63	5.00	28.60	5.31
Ai	19.87	5.25	21.00	5.40	20.80	7.35
Ie	40.12	7.47	39.15	6.21	39.60	6.88
Py	11.87	3.37	12.00	4.09	10.40	3.66
Fx	8.75	3.83	9.89	4.22	11.80	2.48
Fe	18.87	2.61	18.05	3.11	19.00	2.60

who plan to enter special, public, and college libraries, and from this table it appears that college and public librarians present data that are substantially equal. Both groups, however, tend to have slightly lower elevations than those men who expressed a preference for special libraries, even though statistical differences which were sought through analysis of variance could not be found.

While data such as this might give some indication as to how the scores on each of the CPI scales relate when only library students are examined, it does not show how the 19 men who wished to enter higher education compared to a larger sample of men in various occupations. To gain some insight on this point, means and standard deviations from Table 3 were tested against the men who were hoping for positions in academic libraries, and the results are given in Table 19. In this series of tests, the student "t" not only shows that composite scores are higher on every scale except one, but it also indicates that 11 of these 17 differences are statistically significant. Equally pertinent is the circumstance that the only scale on which the library students scored higher is Femininity, and again with a difference that has p <.05.

By examining each of the profiles generated by the 19 male students who indicated an interest in academic libraries, it was found that the entire sub-sample could be divided into three rather distinguishable categories. For present purposes, these sub-samples may be thought of as high, medium, and low scorers on the CPI, and among the many interesting aspects of such a division is the fact that there is almost an equal

TABLE 19

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH
COMPARE MALE LIBRARY STUDENTS WANTING
TO WORK IN COLLEGE LIBRARIES TO
COMPOSITE DATA ON MEN
FROM CPI MANUAL

	Composite Scores on Men[1] N-1865		Male Students Wanting College Work N-19		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	30.47	5.61	27.94	4.49	2.53	1.95*
Cs	21.73	3.75	19.89	5.34	1.84	2.11*
So	26.30	4.72	23.73	5.44	2.57	2.35**
Sp	37.99	5.66	34.47	8.22	3.52	2.68**
Sa	22.25	5.79	21.63	3.98	.62	.71
Wb	38.67	3.70	36.57	5.25	2.10	2.44**
Re	32.12	4.38	30.26	4.89	1.86	1.83*
So	36.65	4.73	35.31	6.28	1.34	1.22
Sc	30.91	6.91	27.63	5.80	3.28	2.05*
To	24.70	4.35	22.42	5.67	2.28	2.26*
Gi	[illegible].07	6.17	17.00	4.67	2.07	1.45
Cm	26.12	1.70	24.57	3.52	1.55	3.87**
Ac	29.53	4.21	27.63	5.00	1.90	1.95*
Ai	21.79	4.60	21.00	5.40	.79	.74
Ie	41.46	4.86	39.15	6.21	2.31	2.04*
Pm	13.08	3.09	12.00	4.09	1.08	1.51
Fx	10.61	4.56	9.89	4.22	.72	.68
Fe	16.53	3.81	18.05	3.11	-1.52	1.73*

*p <.05
**p <.01
[1] Same data as appears on Figure 1

TABLE 20

MEANS AND ANALYSIS OF VARIANCE ON 19 CATEGORIZED MALE LIBRARY STUDENTS PLANNING TO WORK IN COLLEGE LIBRARIES

Categories / Scale	High Scorers N-5 Means	Moderate Scorers N-7 Means	Low Scorers N-7 Means	Analysis of Variance F Score
Do	30.00	30.00	24.42	4.46*
Cs	25.00	21.28	14.85	11.67**
Sy	29.00	26.00	17.71	25.29**
Sp	43.20	35.14	27.57	10.11**
Sa	24.00	23.57	18.00	7.53**
Wb	41.40	38.00	31.71	10.35**
Re	33.40	32.71	25.57	9.33**
So	38.60	35.85	32.42	1.43
Sc	32.80	28.42	23.14	6.17*
To	29.00	23.14	17.00	18.22**
Gi	20.60	17.00	14.42	2.91
Cm	26.00	25.28	22.85	1.35
Ac	32.60	28.71	23.00	11.58**
Ai	26.40	22.71	15.42	18.01**
Ie	46.40	40.57	32.57	30.39**
Py	15.60	12.28	9.14	5.01*
Fx	13.60	8.71	8.43	3.03
Fe	19.00	17.71	17.71	0.27

*$p < .05$ @ d.f.=2 & 16
**$p < .01$

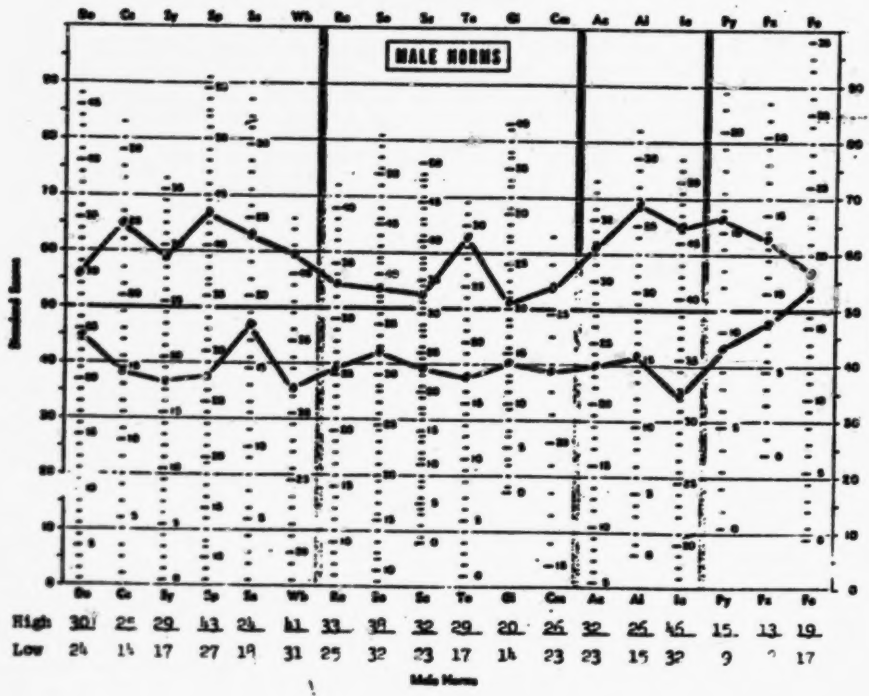
number of men in each group. Table 20 presents means and standard deviations for each of these sub-samples, and from this table a pattern emerges that runs from low means to more moderate scores and then to higher averages. In the right-hand column of this table can be found an analysis of variance F score which differentiates 13 of the 18 scales, with most of them significant beyond .01.

Table 20 demonstrates statistically what is rather evident from an examination of separate profile sheets, namely, that distinct populations seem to be present within this group of 19 male library students. The best way to appreciate the plight of the 7 men who comprise this low-score population is by graphing the raw means on to a CPI profile sheet. When this is done, as in Figure 3, it becomes clear that the only score they have which is above the profile's mid-point is on Femininity, and the only other averages produced by this group which even approach the standard score line of 50 are on the Self-Acceptance and Flexibility scales. Thus, these 7 men exhibit few of the characteristics generally associated with ambition or of making one's presence felt in group situations. By the same token, all scores pertinent to maturity and the assimilation of society's rules are virtually one standard deviation below the mean of 50, while the elevation on that part of the profile dealing with academic matters--or the way in which a person puts his intellectual capacity to work--is no higher.

2

FIGURE 3

COMPOSITE PROFILES GENERATED FROM MEAN SCORES OF
5 HIGH AND 7 LOW SCORING MALE STUDENTS
WHO PLAN TO WORK IN
ACADEMIC LIBRARIES



Another view of the 19 students who hope to be college librarians is possible by examining the correlation matrix which comprises Table 21. This matrix not only shows the statistical association of all variables in the questionnaire that are of a continuous nature, but it includes coefficients which pertain to Social Maturity and Composite Achievement, Expectation, and Satisfaction. Equally important is the inverse correlation between Social Maturity and the total number

TABLE 21

CORRELATION MATRIX SHOWING ASSOCIATION BETWEEN VARIABLES DRAWN
FROM BOTH QUESTIONNAIRE AND CPI FOR 19 MALES WHO
PREFER TO WORK IN ACADEMIC LIBRARIES

	Social Maturity	Composite Achievement	Expectation	Satisfaction	Age	No. Yrs. Teaching	No. Yrs. Working (not teaching)	No. Yrs. Both Working And Teaching
Social Maturity	1.000	.611	.580	.377	-.137	.050	-.477	-.423
Composite Achievement	.611	1.000	.379	.311	-.398	-.407	-.319	-.611
Expectation	.580	.379	1.000	.491	.080	.155	-.216	-.117
Satisfaction	.377	.311	.491	1.000	-.165	.158	-.345	-.228
Age	-.137	-.398	.080	-.165	1.000	.496	.466	.776
No. Yrs. Teaching	.050	-.407	.155	.158	.496	1.000	-.303	.430
No. Yrs. Working (not teaching)	-.477	-.319	-.216	-.345	.466	-.303	1.000	.707
No. Yrs. Both Working And Teaching	-.423	-.611	-.117	-.228	.776	.430	.707	1.000

r = .390 for significance at .05
d.f. = 17

of years worked regardless of occupation. No less thought provoking are the coefficients that show how the variables correlate with Composite Achievement. From these data it would appear that the higher these men scored on this measure of mental efficiency, achievement, and motivation, the higher they also scored on Expectation and Satisfaction. Conversely, the more years the men of this sub-sample worked prior to June 1967, the lower they scored on this specially contrived measure of achievement. As a final observation, there is a substantial inverse correlation between most variables and the number of years these 19 library students had worked in occupations other than teaching.

Mention was made earlier that these three sub-samples were comprised of 5 men in the high category, 7 in the moderate range, and 7 students in the low group. This distribution has particular importance when it is remembered that the total number of men in the entire investigation was only 35; for, out of all the male library students who participated in this study--including those who wished to enter school, public and special library work--one out of five who could be characterized as a low scorer on the CPI wished to become a college or university librarian.

Summary

This study was concerned both with discovering how librarians perform on the California Psychological Inventory in comparison to other occupational groups and with intra-group differences that became apparent when librarians were sub-divided into various categories. The basis for these sub-samples, or categories, was a questionnaire that was completed by all subjects in this investigation. Data gathered by means of the CPI was analyzed in terms of these categories by using such tools as analysis of variance, the student "t," and the Pearson product-moment correlation.

The present investigation confirmed previous findings that the typical age of library science students is older than that of most graduate students. And, again in keeping with previous findings, it was also noted that 5 out of 7 students participating in this study had worked full-time in some occupation before entering library school. Of the 35 men, 19 indicated they wanted to work in a college or university library upon completion of their formal training.

As a group, the 35 library students had mean scores on most CPI scales that were below composite means generated from data on 14 occupational groups listed in the CPI manual. Twelve of these differences were statistically significant, while one--the Femininity scale--had a difference in favor of librarians. The high score on this Femininity scale proved through various analyses to be a distinctive feature of the librarians' profile, and it is noteworthy that the adjectives which have been used to describe high scorers on this scale appear to fit the description of the stereotype librarian.

Because it is doubtful whether occupational groups listed in the CPI Manual should be amalgamated in a manner that would take the form of national norms, the 35 librarians were compared separately to the occupational profiles listed on page 34 of the Manual. In making such comparisons, "t" scores indicated that salesmen, social work graduate students, medical school applicants, and comparable occupational groups had higher scores than did librarians. On the other hand, military officers and school superintendents had similar profiles, while machine operators and correctional officers appeared to be lower.

Because such comparisons do not necessarily mean that one group is better adjusted than another, and because such descriptive statistics tend to prove very little, the real task of this investigation was to discover intra-group differences, particularly as they were apparent among combinations of students that could be identified from data on the questionnaire. In this connection, there was a tendency for men who had held full-time positions before entering library school to score higher on those CPI scales that deal with poise, ascendency and self-assurance, while men who had not held full-time jobs had somewhat higher scores on scales that deal with socialization, maturity, and responsibility. No significant differences could be detected on that part of the Inventory pertaining to achievement orientation or interest modes.

It was found that 10 out of the 35 men participating in this investigation were highly satisfied with their former work, insofar as a designation of 9, or 10 on the questionnaire's rating scale manifested such satisfaction. On the other hand, 19 of these men were only moderately satisfied and 6 marked the Satisfaction scale no higher than 4, presumably indicating considerable dissatisfaction. By use of "t" tests, it was found that these low satisfaction students scored significantly below the more satisfied participants on 7 of the 18 CPI scales; furthermore, a correlation test revealed significant association between five CPI scales and self rankings on the Satisfaction scale. Finally, a correlation of -.271 was noted between the number of years these men had worked (considering only those men who had held positions) and their self-ratings on the Satisfaction scale. Such a finding gave some indication that the longer these men had worked the lower they tended to rate themselves on job satisfaction.

An overwhelming majority of these male students felt they would enjoy working in libraries. Only 3 men out of 35 felt they would receive so little satisfaction from library work that they felt obliged to mark the Expectation scale no higher than 5. There was, in addition, not only significant correlation between rankings on the Satisfaction and Expectation scales, but those who ranked themselves high on the Expectation scale showed significantly higher mean scores on 14 of the CPI scales than did those with little expectation. And, the Expectation scale related to the Inventory in yet another way, for it was found that 12 of the CPI scales correlated significantly with Expectation ratings.

The social maturity formula, which was invented by the author of the California Psychological Inventory, was utilized in a number of instances throughout this study. As this formula apparently differentiates between occupations, the mean score of the 35 male librarians was ranked in hierarchial fashion with mean scores for 15 other occupations which have been published in various writings by the CPI author. The library students' mean of 50.237 is virtually the same as Harrison Gough's established mean of 50.76, but in relation to the other occupations, the librarians ranked no higher than eleventh--above shop foremen but below regional sales supervisors.

When the 35 men of this study were arranged into sub-groups according to (1) age, (2) occupation, (3) job satisfaction, (4) number of years worked, and (5) type of library in which they hope to find a position, an analysis of variance showed no significant differences among the Social Maturity mean scores. However, when these men were arranged by their ranking on the Expectation scale, viz., 2-5; 6-8; and 9-10; analysis of variance did yield an F score significant beyond 1 percent. When carried one step further, rankings on the Expectation scale also proved to correlate significantly, r=.568, with social maturity scores; and, an even higher correlation coefficient, r=.643 was produced when the Composite Achievement standard score was tested for association with Expectation.

In conclusion, it was found that 19 of the 35 male students indicated they wished to work in an academic library upon completion of their professional training. While five of these 19 men had scores on the CPI scales which can be characterized as high, seven of the 19 had profiles which fell within a moderate range, and another seven generated means which showed them to be well below the average. Such a circumstance would mean that of the four types of libraries in which these 35 men could choose to work, 7 of the 35--or 1 out of every 5--are low scorers on the CPI who wish to enter higher education.

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CHAPTER IV

ANALYSIS OF DATA ON FEMALE LIBRARY STUDENTS

A total of 115 women participated in this investigation by completing the California Psychological Inventory and the accompanying 10-point questionnaire. Although the 35 men, as a group, were found to be older than the typical graduate student, the women of this study reported even more striking data in this regard, for their ages were discovered to be even greater than those of the male library students. The following is a brief resume of female ages as they were compiled from the questionnaire:

Age Range	Number of Students
22 or less	20
23 -- 25	21
26 -- 30	17
31 -- 40	22
Over 40	35

Such data indicate that at the time of this study 57 students--or approximately 50 percent of the sample--were at least 31 years of age, and the mode was in the "Over 40" range. Moreover, a total of 74 of these women were at least 26 years of age as compared to only 41 that were under 25.

A total of 34 women indicated on the questionnaire that they had never held a full-time, self-supporting job--either in teaching or in some other line of work. On the other hand, 52 students out of 115 described themselves as former teachers in the public schools. This would mean that almost half the sample had spent at least some time in the classroom, and as such it would give further support to earlier research which showed that as many people go into library work from teaching positions as from all other occupations combined. In breaking this down, it came to light that a plurality of these 52 teachers had 3 to 5 years experience in public school education, while as many as 13 had spent over 10 years in such work. The following tabulation is given as a convenience in studying the distribution of years which the entire sub-sample had accumulated in teaching experience.

Number of Years	Number of Students
1 Year	4
2 Years	7
3-5 Years	19
6-10 Years	9
Over 10 Years	13

It was pointed out in Chapter 3 that differences pertaining to intra-grouping of the subjects produce findings of greatest importance to this study. With this in mind, Chapter 4 will present only a brief discussion of how the women in this study, as potential librarians, compare to other occupational groups listed in the CPI Manual. Following this brief presentation, the report will concentrate on differences within the sample by comparing data found among sub-groups which in turn were identified by means of the questionnaire.

TABLE 22

SUMMARY OF MEANS AND STANDARD DEVIATIONS GENERATED BY 150 MEN AND WOMEN LIBRARY STUDENTS ON 18 SCALES OF THE CPI

Sex	Men; N-35		Women; N-115	
Scale	Means	S.D.	Means	S.D.
Do	28.94	5.79	27.32	6.58
Cs	20.20	5.21	19.64	3.87
Sy	24.31	5.21	23.19	5.90
Sp	35.94	7.40	33.01	7.39
Sa	22.05	3.86	20.96	4.18
Wb	36.88	5.29	35.55	4.59
Re	29.94	5.09	33.20	4.43
So	34.80	5.83	38.37	5.34
Sc	27.54	6.65	30.33	7.15
To	22.74	5.77	22.50	4.69
Gi	17.02	5.10	17.18	5.86
Cm	24.60	3.33	25.69	1.81
Ac	27.57	4.97	28.46	4.15
Ai	20.82	5.52	21.31	5.87
Ie	39.54	6.39	38.65	5.65
Py	11.60	3.75	11.53	2.84
Fx	9.74	3.75	9.78	3.98
Fe	18.17	2.95	23.78	2.94

Table 22 sets forth the 18 CPI means and standard deviations for the 115 female students who participated in this study, and for purposes of comparison, reiterates data generated by the 35 men discussed in Chapter 3. From this table one can see that male students have slightly higher raw scores on the first six scales, or that part of the CPI having to do with poise, ascendency, and self-assurance, while the women have higher means on the second six scales, i.e., maturity, socialization, and responsibility. It must be remembered, of course, that raw scores will not in themselves produce a valid picture for the two sexes; however, if these 18 pairs of means are projected to male and female profile sheets, respectively--thus automatically transforming them to standard scores--and if such profile sheets are made of transparent material which can be super-imposed on each other, it will then be clear that men are higher on each of the first six scales and lower than women on each of the second set of six scales. Such over-lays will also show that data on the three scales which deal with achievement orientation are virtually identical, as are those scores relating to Psychological Mindedness and Flexibility.

But the scale that seems to offer the most significant contrast between men and women in this investigation is Femininity. According to these data, the men of this study resupinate most findings in the literature relative to the Fe scale by scoring higher than the women. This would mean that while the women students, with their standard score of 52, seem to fit those adjectives which describe a middle range of scores for large unselected female samples, the men appear in relation to other males as more helpful, gentle, and moderate; and less active, hard-headed, and masculine. The other scales which seem to offer greatest contrasts are Social Presence, and Self-Acceptance where the men score higher, and Responsibility, where the women have a higher standard score.

The CPI Manual (4:35) does not contain as many occupational distributions for women as it does for men. However, a comparison, even though superficial, which shows how the 115 women of this investigation relate to a composite of occupational data drawn from the Manual is not out of order. Accordingly, means and standard deviations were compiled from tables in the Manual which set forth data on (1) Social Work Graduate Students, (2) Psychology Graduate Students, (3) Airline Hostesses, and (4) Nurses. Just as in Chapter 3, the standard deviations for this composite were determined in the manner prescribed by Ferguson (2), and the results of such computations are presented in Table 23. In this table, the 115

TABLE 23

SUMMARY OF MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARES FEMALE LIBRARY
STUDENTS TO COMPOSITE DATA
FROM CPI MANUAL

	Composite Data From Manual; N-446[1]		Female Library Students; N-115		Statistics	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.79	5.21	27.30	6.61	1.49	2.59**
Cs	22.69	3.12	19.60	3.89	3.09	9.02**
Sy	25.22	4.39	23.20	5.93	2.02	4.02**
Sp	39.20	5.58	33.00	7.42	6.20	9.84**
Sa	22.30	3.56	20.90	4.20	1.40	3.65**
Wb	37.92	3.74	35.50	4.61	2.42	5.87**
Re	32.93	3.70	33.20	4.45	.27	.74
So	38.09	4.66	38.40	5.36	.31	.59
Sc	31.05	7.15	30.30	7.18	.75	.92
To	26.31	3.46	22.50	4.71	3.81	9.60**
Gi	19.04	5.99	17.20	5.89	1.84	2.91**
Cm	25.60	1.69	25.70	1.82	.10	.55
Ac	29.09	3.71	28.50	4.17	.59	1.50
Ai	24.64	3.99	21.30	3.89	3.34	8.07**
Ie	42.47	3.74	38.70	5.68	3.77	8.65**
Py	13.23	3.25	11.50	2.86	1.73	5.16**
Fx	13.58	3.66	9.80	4.00	3.78	9.84**
Fe	22.22	3.42	23.80	2.95	1.58	4.62**

[1] p.35 of CPI Manual: Social Work Graduate Students, Psychology Graduate Students, Airline Hostesses, and Nurses.

*p <.05

**p <.01

library students show higher mean scores than the Composite on Responsibility, Socialization, Communality, and the Femininity; however, the differences are small and none, except the one on Femininity, is statistically significant. On the other hand, the women from the Manual have statistically higher means on 12 out of 18 scales, 6 of which come from the Poise, Ascendency, and Self-Assurance cluster, and 2 from the 3 scales devoted to Achievement Potential and Intellectual Efficiency.

As was the case with the men students, college women were omitted from the above calculations because of the age factor found in the CPI. To verify the assumption that age might effect the scores, however, data on college women (4:35) were subsequently computed with the occupational groups mentioned above and the resulting means were compared to those in Table 23. With the college students included it was found that the means were indeed depressed, just as was the case when the men were similarly tested; so, with this in mind, a separate comparison was made between the 115 female librarians and data pertaining to the Manual's 2,120 college students. In this case, student "t" tests indicated that while librarians had higher means on 4 of the scales, none were statistically significant. The college women, on the other hand, had higher means on 14 scales with 7 of them showing significant differences.

From these data, the female library students appear to be low on mean scores throughout the first six scales, though in absolute terms the only one on which they markedly depart from a standard score mean of 50 is Well-Being. In the second cluster these students have scores that are quite similar to those of the composite even though their Good Impression mean approaches a standard score of 45 and Tolerance is statistically smaller than the Manual mean. The only noticeable peak which appears in their profile is on Achievement via Independence, and this notwithstanding the fact that the composite is still statistically higher. From these configurations emerges a picture of a group that is not assertive nor known for being either flamboyant or particularly sociable. As a group, these library students appear to have inculcated the rules of society and exhibit the type of control which shows they favor such rules. They have at least average intelligence but they seem to feel most confortable when working toward their goal through individual effort. Their slightly above-average scores on the last three scales of the profile bespeak a nurturing disposition rather than a personality that stirs things up or attacks problems in a coarse and mannish mien.

Through item analysis, the 115 female library students of this investigation can be studied in yet another manner. There was a total of eight questions which were answered true by 25 percent more of these women than would be expected on the basis of CPI norms. Below is a list of these questions, together with the actual percentage of students who answered in the affirmative, and the percentage of true answers which should be expected.

Question No.	Text of Question	(Percentage of Librarians --- Norm Percentages)
124	I am likely not to speak to people until they speak to me.	(38-6)
134	It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of thing.	(63-36)
146	I would like to wear expensive clothes.	(82-37)
207	Sometimes at elections I vote for men about whom I know very little.	(67-32)
217	I think I would like the work of a librarian.	(98-37)
222	I would like to belong to a discussion and study club.	(71-42)
228	I like to read about history.	(82-42)
246	I like to plan out my activities in advance.	(80-17)

Because conclusions can also be made about groups of people on the basis of ideas which they typically reject, an item analysis was also carried out on those questions that more often draw negative responses. As was the case with the material presented above, the following is a list of the actual questions that were answered true by 25 percent fewer of the female library students than is expected when dealing with norms for the CPI.

Question No.	Text of Question	(Percentage of Librarians --- Norm Percentages)
17	I would like to be a journalist.	(14-42)
33	Usually I would prefer to work with women.	(15-40)
41	For most questions there is just one right answer, once a person is able to get all the facts.	(20-50)
59	The trouble with many people is that they don't take things seriously enough.	(40-68)
63	It is always a good thing to be frank.	(22-51)
77	When I get bored I like to stir up some excitement.	(39-67)
155	A person should adapt his ideas and his behavior to the group that happens to be with him at the time.	(30-60)
167	I should like to belong to several clubs or lodges.	(33-60)
218	I love to go to dances.	(39-76)
237	The future is too uncertain for a person to make serious plans.	(4-30)
255	Only a fool would try to change our American way of life.	(25-66)
370	Disobedience to any government is never justified.	(13-48)
382	Success is a matter of will power.	(43-72)

When the 115 library science students were compared separately to each of the Manual's four occupational groups, (c.f. Appendix Table 14-17) psychology students scored higher than the librarians on Achievement via Independence and Intellectual Efficiency, as well as on Flexibility and Psychological Mindedness. In addition, differences beyond .01 were found on three of the scales relating to poise, ascendency, and self-assurance. Similarly, the social work graduate students not only scored higher than librarians on every scale except Femininity, but the differences that were particularly pronounced correspond rather closely to those found when the psychology students were compared to librarians.

In a third set of tests, the 115 library science students were found to have significantly lower means than airline hostesses on every scale in the poise, ascendency, and self-assurance cluster, while librarians scored significantly higher on Responsibility, Femininity, and Self-Control. And in a final comparison, the librarians appeared to have a profile most like that of nurses, for librarians scored higher only on Self-Control, Achievement via Conformity, and Psychological Mindedness; while the nurses differed significantly from the librarians only on Sociability.

Number of Years Which Women Have Worked

It might be thought that a paper and pencil test such as the California Psychological Inventory would produce varying profile configurations among women who have worked at different jobs over given periods of time. In the social expectations of middle-class America, women differ from men in that the latter have many more pressures placed on them to assume full-time, self-supporting jobs. Those women who do enter the world of full-time employment take on such responsibilities for a number of reasons, not all of which stem from the necessity of making a living. But just as was the case with men, women who find their way into library positions typically enter this field after they have first worked at some other job. Therefore, it might be reasonable to ask whether the number of years which these women held full-time jobs are reflected in various scales which comprise the CPI.

To make such a determination, the women of this study were first arranged as in Table 24 by the number of years they had worked. Upon studying

TABLE 24

MEANS, STANDARD DEVIATIONS, AND F SCORES ON 18 CPI SCALES
PROFILING FEMALE LIBRARY STUDENTS WHEN
ARRANGED BY NUMBER OF YEARS
SPENT IN ALL TYPES OF WORK

Years Worked	0 Years N-34		3-5 Years N-25		Over 10 Yrs N-21		Analysis of Variance
Scale	Means	S. D.	Means	S. D.	Means	S. D.	F Score
Do	25.62	7.13	27.44	5.37	28.09	5.73	1.18
Cs	19.15	4.17	19.96	3.95	20.33	3.47	.66
Sy	21.73	6.58	23.40	5.59	24.67	5.56	1.60
Sp	32.88	8.90	33.20	6.02	32.62	7.34	0.03
Sa	21.03	4.87	20.36	3.30	21.38	3.92	0.36
Wb	34.18	5.05	35.56	3.50	37.76	5.08	3.89*
Re	31.47	4.45	32.92	5.13	36.14	2.61	7.73**
So	37.70	6.18	38.72	4.85	38.71	4.58	.34
Sc	27.29	6.27	31.56	6.99	34.19	7.85	6.89**
To	20.85	4.82	22.36	4.78	25.09	3.99	5.50**
Gi	15.50	5.02	18.40	6.09	20.95	7.18	5.55**
Cm	25.79	2.01	25.40	1.82	25.28	1.82	0.55
Ac	27.15	4.20	29.12	3.47	30.48	3.89	4.99**
Ai	20.56	3.79	21.36	4.51	21.52	3.34	.49
Ie	37.97	5.89	39.00	6.04	38.86	4.92	.28
Py	10.85	2.85	11.64	2.64	12.76	2.68	3.14*
Fx	10.38	4.64	9.88	4.41	9.28	3.49	.42
Fe	23.91	3.14	23.20	2.72	24.24	2.41	.83

*p .05
**p .01
d.f. = 2 & 77

the data which these various sub-groups generated, it is possible to see a rather clear progression of ascending means from lows among those who haven't worked to highs among those with at least 10 years experience. Such data, when tested by analysis of variance, shows that while many of the differences fall short of statistical significance, a cluster of F scores do appear within the Socialization, Maturity, and Responsibility part of the Inventory. Because these women have been grouped in a manner that can be characterized as young to older, an ascending order of means on these particular scales may indicate that those who have worked for a substantial number of years have tended to internalize the constraints and rules of the social milieu in which they have found themselves.

After determining the possible relationships of work experience to discrete scales embodied in the CPI, it then became important to discover how self-rankings on the satisfaction scale might also relate to the Inventory. The satisfaction scale as described in Chapter 1 was also completed by the 115 women of this study, and upon compiling their self-ratings it was found they had a mean score of 7.173, and standard deviation of 2.213. Table 25 not only shows how these rankings were distributed, but from this tabulation one can also determine that 21, or 18 percent, of the women marked "10" on the scale--a number that was intended to indicate entire satisfaction with former work. On the other hand, 12 of these women ranked themselves no higher than "4," and based on a mean of 7.173 and standard deviation of 2.213, such a ranking would not only place them below the first standard deviation, but presumably would categorize them as dissatisfied.

TABLE 25

DISTRIBUTION OF SELF-RANKINGS INDICATIVE OF
SATISFACTION WHICH 115 FEMALE STUDENTS
REALIZED FROM FULL-TIME JOBS
PRIOR TO ENTERING LIBRARY
SCHOOL

	Unsatisfying				SATISFACTION			Highly satisfying		
Scale	1	2	3	4	5	6	7	8	9	10
No. of Students	2	2	4	4	14	15	18	20	15	21

Carrying through with this assumption, all women were arranged by their self-ratings on the Satisfaction scale and grouped as shown in Table 26. Upon first examining the analysis of variance, F scores would indicate that differences on the 18 CPI scales had happened only by chance, for statistical differences appear on just three of the 18 scales. Closer study, however, shows apparent differences between the "2-4" group and the "9-10" group, and when these differences are subjected to "t" tests a total of 5 out of 18 scales prove to be statistically significant. Moreover, a pattern emerges in the way

TABLE 26

MEANS, STANDARD DEVIATIONS, AND F SCORES ON
18 CPI SCALES PROFILING FEMALE LIBRARY
STUDENTS WHEN ARRANGED BY SELF-
RANKINGS ON SATISFACTION SCALE

Satis-faction / Scale	2-4 N-12		5-8 N-67		9-10 N-36		Analysis of Variance
	Means	S.D.	Means	S.D.	Means	S.D.	F Score
Do	27.41	6.41	26.58	7.12	28.66	5.45	1.17
Cs	19.25	3.57	19.46	4.05	20.11	3.69	0.39
Sy	21.08	7.08	22.62	5.95	24.94	5.08	2.73
Sp	33.16	7.23	32.50	7.50	33.91	7.34	0.42
Sa	21.58	4.79	20.61	3.95	21.41	4.45	0.57
Wb	33.58	3.98	35.10	5.05	37.05	3.40	3.48*
Re	32.91	3.96	33.25	4.56	33.19	4.45	0.02
So	37.75	5.06	37.82	5.72	39.61	4.56	1.41
Sc	27.91	7.24	30.28	7.29	31.22	6.87	0.96
To	21.58	3.94	22.25	5.22	23.27	3.79	0.81
Gi	14.75	5.91	16.67	5.82	18.94	5.61	3.01
Cm	25.66	1.87	25.55	1.84	25.97	1.74	0.62
Ac	26.83	4.52	28.02	4.27	29.83	3.50	3.37*
Ai	21.91	3.89	21.38	4.07	20.97	3.54	0.29
Ie	38.08	6.02	38.05	5.78	39.94	5.20	1.37
Py	10.16	2.32	11.29	2.90	12.44	2.68	3.60*
Fx	9.33	4.97	10.08	3.89	9.36	3.86	0.47
Fe	24.41	2.64	23.68	2.70	23.75	3.47	0.31

*$p < .05$ d.f. = 2 & 112

these differences manifest themselves, for the largest "t" scores appear on all scales in the second and third clusters except those labeled Responsibility, Communality, and Achievement via Independence.

Correlations were next made between rankings on the Satisfaction scale and each of the CPI scores. In this case, significant correlations were found on 7 of the scales: Sociability, Well-Being, Tolerance, Good Impression, Achievement via Conformity, Self-Control, and Psychological Mindedness. These 7 include all of the 5 scales which proved to have significant differences in the "t" test mentioned above. Consequently, this combination of circumstances would lend some evidence to the conclusion that low scorers on the Satisfaction scale also tend to be low scorers on the CPI's achievement and intellectual efficiency cluster, as well as on that part of the test which deals with internalizing values, with measures of an enterprising attitude, and the type of ingenuity which values intellectual activity.

In Chapter 3 test data was reported on a Composite Achievement index that was contrived by amalgamating the three standard scores which deal with Achievement via Independence, Achievement via Conformity, and Intellectual Efficiency. When rankings on the Satisfaction scale were correlated with this index, a rho of .162 was realized. While such a correlation is not particularly large, it nevertheless is statistically significant at .05 when 113 degrees of freedom are considered. The Satisfaction scale also showed a correlation coefficient of similar magnitude, viz., .165, when it was matched with the number of years these women had taught. And, finally, the Satisfaction self-rating showed an inverse correlation, significant at .05, with the number of years the 115 women students had worked at full-time positions outside the field of education.

On the basis of these data, it would appear that those library students who rated themselves low on job satisfaction also tended to score low on the Composite Achievement index. These same low scorers on Satisfaction were more likely to be the ones with the fewest years of teaching experience and the largest number of years in full-time positions outside the field of education. Most important of all, however, was that when women who had never worked in any capacity were taken out of the sample and only those students with actual work experience were examined, there was a coefficient of .339 between the number of years worked and self-rankings on the Satisfaction scale ($p < .005$). Furthermore, when only those women who had actually taught were similarly considered, a correlation of .461 resulted. Such findings would further substantiate the statement above that those women who stayed in the classroom the greatest number of years were the ones who enjoyed it the most.

Expectation Scale

When applied to the 35 men of this study, the Expectation scale proved to be one of the most useful tools in the entire investigation.

TABLE 27

DISTRIBUTION OF SELF-RANKINGS INDICATIVE OF SATISFACTION WHICH 115 FEMALE STUDENTS EXPECT TO RECEIVE FROM PROFESSIONAL LIBRARY POSITIONS

	Unsatisfying			EXPECTATION				Highly Satisfying		
Scale	1	2	3	4	5	6	7	8	9	10
No. of Students			1	1	1	3	12	24	35	38

When this same scale was examined for self-rankings by women, a mean of 8.704 and standard deviation of 1.337 was discovered. If a ranking of 9 or 10 is synonymous with the adjective "highly satisfied," then 64 percent of the women participating in this study would have to be described as thinking they will be highly satisfied with library work once they have entered the professional ranks. Furthermore, 31 percent rated themselves at 7 or 8, perhaps in the belief they will be moderately satisfied, while 5 percent of the women ranked themselves at no higher than 6. Presumably, as well as on the basis of standard deviation, such women do not expect much satisfaction from professional librarianship.

In actual numbers, Table 27 shows that 18 students ranked themselves at a point no more than "7" and only 3 rated themselves as expecting no more than "5." This total of 3 with an expectancy rating of no more than "5" compares with 26 women who marked the Satisfaction scale at a point no greater than "5"; yet, it is interesting to note that the same 4 who rated themselves no higher than 5 on the Expectation scale were among the 26 women who were no higher than 5 on the Satisfaction scale. It is also worthy of mention that 14 women who were pleased enough with their former occupation to mark "6-10" on the Satisfaction scale, failed to rate themselves higher than "7" on the Expectation scale.

TABLE 28

MEANS, STANDARD DEVIATIONS, AND F SCORES ON 18 CPI SCALES PROFILING FEMALE LIBRARY STUDENTS WHEN ARRANGED BY SELF-RANKINGS ON EXPECTATION SCALE

Expectation / Scale	3-7 N-18		8-9 N-59		10 N-38		Analysis of Variance
	Means	S.D.	Means	S.D.	Means	S.D.	F Score
Do	22.66	5.79	27.78	6.76	28.81	5.79	6.11**
Cs	16.61	2.87	20.03	3.79	20.47	3.82	7.43**
Sy	18.27	5.28	23.49	5.27	25.05	5.98	9.39**
Sp	28.67	7.53	33.63	6.74	34.13	7.75	3.94*
Sa	17.94	3.06	21.29	3.92	21.89	4.49	6.33**
Wb	32.22	6.01	35.49	4.03	37.24	3.83	8.19**
Re	30.61	4.59	33.49	4.37	33.97	4.14	3.96*
So	36.00	5.96	38.34	5.58	39.55	4.31	2.78
Sc	30.11	5.87	29.73	7.48	31.37	7.26	0.61
To	19.61	5.43	22.47	4.53	23.92	4.02	5.55**
Gi	16.11	5.26	16.51	6.11	18.74	5.57	2.06
Cm	24.33	2.06	25.86	1.56	26.08	1.81	6.82**
Ac	25.83	4.22	28.32	4.09	29.95	3.64	6.64**
Ai	20.55	5.46	21.08	3.91	22.03	2.78	1.09
Ie	35.44	5.33	38.69	5.31	40.10	5.83	4.39*
Py	10.55	3.24	11.29	2.94	12.39	2.31	3.13*
Fx	9.72	4.79	9.89	3.91	9.63	3.79	0.05
Fe	24.61	2.52	23.63	2.98	23.63	3.08	0.84

*p. <.05 a d.f.=2 & 112
**p. <.01

Using the standard deviation as a guide, all 115 women were separated by "3-7," "8-9," and "10," as shown in Table 28. As was the case with the men, the Expectation scale was able to delineate significant differences on a substantial number of CPI scales. Table 28, for example, shows that 12 of the 18 scales have differences great enough to put the F score beyond the critical level of significance; furthermore, inspection of the several means indicate they progress from smaller scores to larger ones as the level of expectation rises. This being the case, it seemed that the student "t" test might reveal additional differences between mean scores of those who ranked high on the Expectation scale and those who gave themselves a low rating on this continuum. Accordingly, Table 29 does show a significant "t" score on 13 of the 18 scales

TABLE 29

MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARE FEMALE LIBRARY STUDENTS
WHO RATED THEMSELVES AT OPPOSITE
ENDS OF EXPECTATION SCALE

	3-7 N=18		10 N=38		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	22.66	5.79	28.81	5.79	6.20	3.66**
Cs	16.61	2.87	20.47	3.82	3.90	3.78**
Sy	18.27	5.28	25.05	5.98	6.70	4.02**
Sp	28.67	7.53	34.13	7.75	5.40	2.40**
Sa	17.94	3.06	21.89	4.49	4.00	3.34**
Wb	32.22	6.01	37.24	3.83	5.00	3.71**
Re	30.61	4.59	33.97	4.14	3.29	2.65**
So	36.00	5.96	39.55	4.31	3.50	2.46**
Sc	30.11	5.87	31.37	7.26	1.29	.64
To	19.61	5.43	23.92	4.02	4.30	3.28**
Gi	16.11	5.26	18.74	5.57	2.59	1.62
Cm	24.33	2.06	26.08	1.81	1.79	3.24**
Ac	25.83	4.22	29.95	3.64	4.09	3.69**
Ai	20.55	5.46	22.03	2.78	1.50	1.32
Ie	35.44	5.33	40.10	5.83	4.70	2.85**
Py	10.55	3.24	12.39	2.31	1.89	2.48**
Fx	9.72	4.79	9.63	3.79	-0.10	.08
Fe	24.61	2.52	23.63	3.08	-1.00	1.17

*$p < .05$
**$p < .01$

# d.f.=54

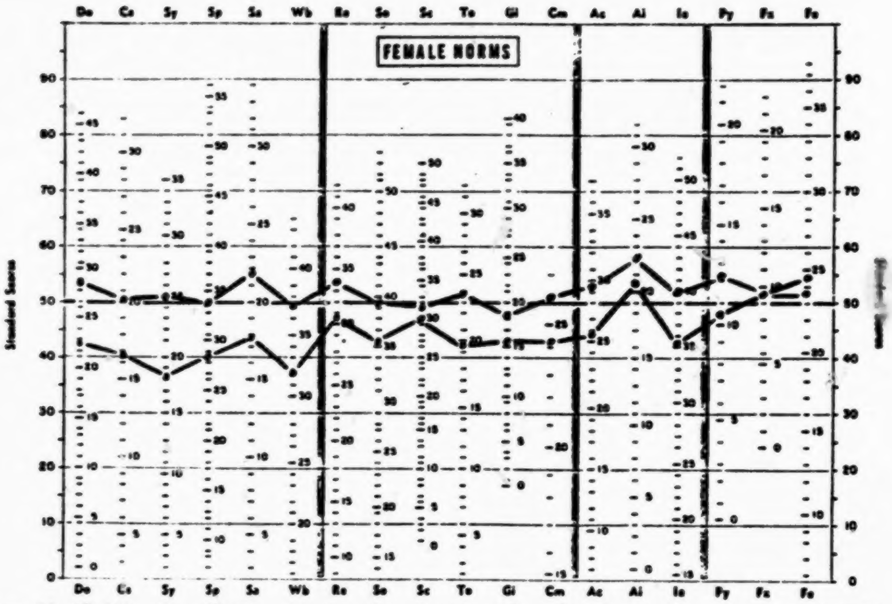
when the lowest group on the Expectation scale is compared to those highest on Expectation. Such results follow a pattern that is by now familiar, for Table 29 indicates that differences are present on every scale in the poise, ascendency and self-assurance cluster, on 5 of the 6 scales in socialization, maturity, and responsibility, and on 2 of the 3 achievement scales.

The usefulness of the Expectation scale was also apparent when it proved to have a number of significant correlations with other variables embodied in the questionnaire. The Composite Achievement score, for example, showed r=.277 when correlated with self-rankings on Expectation; and, among all 115 women, the number of years which these subjects had taught correlated r=.212 with this scale. The number of years worked, whether in teaching or some other occupation, had a similar degree of association, viz., r=.200; however, when correlation was sought between the age of these library students and their self-ratings on the Expectation scale, a significant coefficient failed to appear.

From Table 27, it would appear that the Expectation scale identifies 18 women who are not overly optimistic about the satisfaction they will receive from a career in librarianship. Together, these 18 women produce a composite profile that not only has a low elevation, but which also has a contour suggestive of persons with little ambition, only a modest amount of self-confidence, and the mien of those who are submissive and somewhat constricted in thought. The composite profile of these 18 women is presented in Figure 4, and from this graph a picture

FIGURE 4

COMPOSITE PROFILES GENERATED FROM MEAN SCORES
OF FEMALE LIBRARY STUDENTS WHO
CLUSTER AT OPPOSITE ENDS
OF EXPECTATION SCALE



	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	
Expectation: 10	28	20	25	34	21	37	33	39	31	23	18	26	29	22	40	12	9	23	N=38
Expectation:3-7	22	16	18	28	17	32	30	36	30	19	16	24	25	20	35	10	9	24	N=18

Female Norms

emerges of a type who has neither internalized the values of the social order nor overcome a tendency toward defensiveness and passivity. The accomplishments of a person such as this come largely through individual effort and as a result of working alone, mainly because stereotyped thinking is quite likely to militate against positive action in group situations. Finally, a familiar trait is again evident in Figure 4, for the profile includes a Femininity score that is higher than one would expect in unselected samples.

It has already been pointed out that a total of 18 women comprise the "3-7" group. Such a number represents about 15 percent of the sample, and for ease of comparison, data concerning these students are included in Figure 4 with those of 38 library students who gave themselves an Expectation rating of "10." Figure 4, then, might be said to include profiles on groups of students whose optimism about a career in library work is at opposite ends of the continuum. The high expectation composite has resemblance to an unselected sample, and as such it is not really distinguished in appearance; furthermore, it has no outstanding scores except the one on Achievement via Independence, and perhaps Self-Acceptance. Because of this rather even distribution, it is difficult to make generalizations except to say that a degree of confidence is suggested by both the Self-Acceptance score and the elevation on Achievement via Independence. Such a personality characteristic is, of course, pre-supposed by the self-ranking of "10" on the Expectation scale, but if further verification concerning this trait is needed, it may be seen in the more moderate score on Femininity, where a combination of gentleness and mild activity is intermingled.

Social Maturity

The Social Maturity formula described in Chapter 3 was also used to analyze data of the 115 women in this study. One of the first tasks in examining the women's social maturity scores was to determine how the female library students compared to the males, and in this regard Table 30 indicates that the mean score for the group was 52.574, with standard deviation of 3.425. This compares with a mean of 50.237 for the men librarians, a difference that is in keeping with known data on men and women (3:298). Literature on this subject indicates that women typically score one-half standard deviation higher on the Socialization scale than men, and this conclusion is verified by adjective check-lists which indicate that women--as a generalization--are more law-abiding, sensitive, and refined in role-taking situations.

TABLE 30

DISTRIBUTION OF SOCIAL MATURITY SCORES
FOR 115 FEMALE LIBRARY STUDENTS

Social Maturity Score	No. of Students	No. and Percentage of Students By Standard Deviation	
61	1	1	
59	1	17	15%
58	1		
57	5		
56	10		
55	14	74	64%
54	12		
53	14		
52	5		
51	14		
50	15		
49	2	19	17%
48	10		
47	5		
46	2		
45	2	4	4%
44	1		
41	1		

$\bar{X}$ = 52.574
S.D.= 3.425

As pointed out in Chapter 3, validation of this formula has not been completed for women samples; consequently, literature reporting on its use in analyzing female data is not as plentiful as it is with male subjects. For the sake of comparison, however, Harrison Gough's method of delineating various occupations through use of this formula was applied to the various occupational groups listed on page 36 of the CPI Manual. When the five appropriate samples were assigned ranks according to their Social Maturity standard scores the following order appeared:

Occupational Group	N	Social Maturity Standard Score	Rank
Psychology Students	19	59.00	1
College Students	2,120	56.98	2
Social Workers	324	56.47	3
Nurses	43	55.25	4
Women Librarians	115	55.14	5
Airline Hostesses	60	52.69	6

In this array the library students appear fifth in a list of six occupations. Needless to say, the ordering of the scores is thought-provoking even though only superficial importance can probably be attached to such data, not only because of the small N's, but also because the largest and smallest raw score is separated by only 2.22 points.

In trying to identify sub-groups that have important differences in social maturity scores, the 115 women were separated by (1) the number of years they had worked at full-time jobs, (2) their age categories, (3) the type of library in which they hope to work upon graduation, and (4) self-rankings on the satisfaction scale. Tables 23-25 in the Appendix indicate that no statistical differences exist when partialled out in such a manner; however, when these women were arranged by their self-rankings on the Expectation scale, as in Table 31, an analysis of variance indicated that differences with statistical significance did exist. The F score of 4.12, with degrees of freedom at 2 and 112, falls between the critical level of 3.08 @.05 and 4.80 @.01, thus indicating that the Expectation scale again has a certain predictability for delineating characteristics among these graduate students of library science.

TABLE 31

SUMMARY OF SOCIAL MATURITY MEANS GENERATED
BY FEMALE LIBRARY STUDENTS WHEN ARRANGED
BY SELF-RANKINGS ON EXPECTATION SCALE

Ranking on Scale	Means	Number of Students
3-7	50.505	18
8-9	52.915	59
10	53.025	38

Analysis of Variance F score: 4.12
$p < .05$ @d.f. = 2 & 112

Social Maturity scores of the 115 women in this investigation correlated with only two of the biographical variables in the questionnaire. With the Composite Achievement score, for example, Social Maturity showed strong correlation, $r=.390$; and, when Social Maturity was matched with ratings on the Expectation scale, a correlation coefficient of .259 was found to exist. While both of these coefficients have $p<.01$, other variables embodied in the questionnaire were found to have only chance correlation with Social Maturity. The Satisfaction scale, for example, generated a rho of only .021 when tested for association with Social Maturity, and a coefficient of no more than -.013 was found to exist between the number of years these women had worked and their Social Maturity scores. Later, however, this report will show that when certain sub-groups are formed from the entire sample of 115 women, other significant correlation coefficients do appear between biographical variables and scores derived from the Social Maturity formula.

WOMEN STUDENTS AS PROSPECTIVE COLLEGE LIBRARIANS

From data presented in Chapter 3, evidence would seem to indicate that college and university libraries have an attraction for a substantial proportion of men with personality difficulties. When the women of this study were arranged by the type of library in which they hoped to work (i.e., public libraries, public school libraries, special libraries, and college libraries), and means for each of the 18 scales were examined, analysis of variance indicated that no differences of a statistical nature were present. While it is true that an occasional significant difference from among such means could be detected, no trends or patterns manifested themselves in such comparisons; accordingly, no table is presented.

Nonetheless, from Table 32 it is clear that the 43 women of this study who hoped to find positions in college and university libraries have mean scores on most CPI scales that are significantly less than those which were derived from the Inventory's Manual. Predictably, the one scale on which the library students are higher than the composite is Femininity; moreover, the balance of these differences forms a pattern which parallels the presentations of earlier tabulations. The 43 library students, for example, fare about the same against this composite as did the entire sample when presented in Table 23. To illustrate this, the composite has differences which are beyond .01 probability of error on all scales in that part of the Inventory which deals with a person's ability to assert himself, his ambition, and his perception of self-worth. In addition, while the library students have scores comparable to the composite on scales dealing with maturity and social responsibility, they compare rather poorly to the composite on 5 of the last 6 scales, even though none of these means is below a standard score of 50.

Because it was important to acquire even more information about the 43 women who hoped to be college and university librarians, the profile of each was studied separately. Upon completion of this task it was dis-

TABLE 32

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH
COMPARE WOMEN STUDENTS WHO EXPECT TO BE
COLLEGE LIBRARIANS TO COMPOSITE
DATA FROM CPI MANUAL

	Women Who Want College Work N = 43		Composite Data From Manual N = 446[1]		Statistics	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	26.2	5.8	28.8	5.2	2.6	3.09**
Cs	19.1	3.8	22.7	3.1	3.6	7.10**
Sy	21.8	5.9	25.2	4.4	3.4	4.67**
Sp	32.6	7.2	39.2	5.6	6.6	7.16**
Sa	20.5	4.6	22.3	3.5	1.8	3.12**
Wb	35.4	3.8	37.9	3.7	2.5	4.21**
Re	33.3	4.4	32.9	3.7	0.4	0.66
So	38.9	5.8	38.1	4.7	0.8	1.04
Sc	30.5	7.7	31.0	7.2	0.5	0.43
To	22.7	3.8	26.3	3.5	3.6	6.38**
Gi	17.5	5.9	19.0	5.9	1.5	1.59
Cm	25.7	1.9	25.6	1.7	0.1	0.36
Ac	28.0	4.3	29.1	3.7	1.1	1.83*
Ai	21.8	3.8	24.6	3.9	2.8	4.49**
Ie	38.3	5.9	42.5	3.7	4.2	6.66**
Py	11.8	2.7	13.2	3.2	1.4	2.77**
Fx	10.3	3.9	13.6	3.6	3.3	5.68**
Fe	23.4	3.2	22.2	3.4	1.2	2.22*

[1] p.35 of CPI Manual: Social Work Graduate Students, Psychology Graduate Students, Airline Hostesses, and Nurses.

*$p < .05$

**$p < .01$

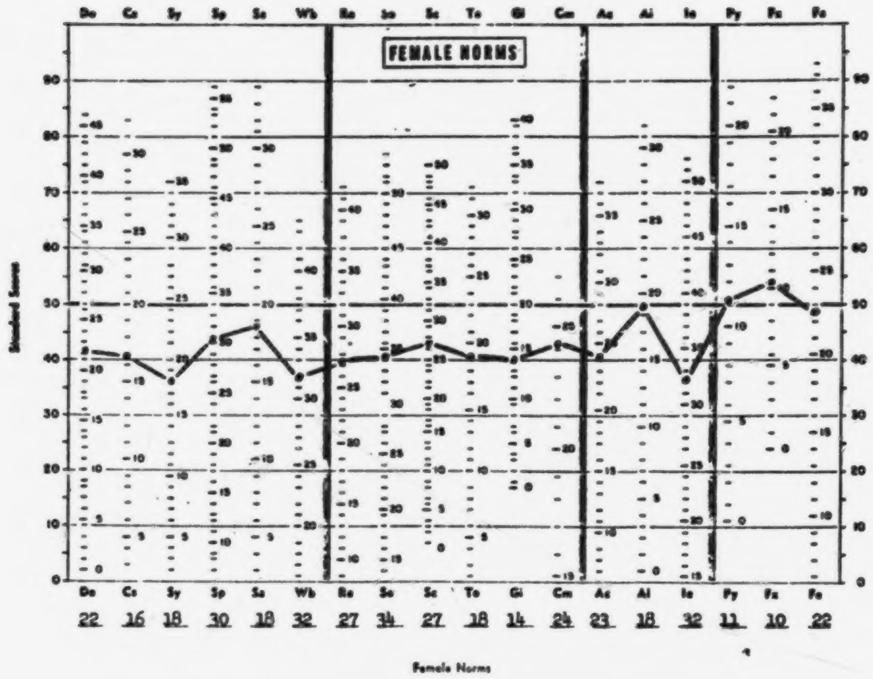
covered that a total of 9 persons appeared to manifest characteristics indicative of various conflicts. A total of 9 women out of 43, of course, is not nearly so great a proportion as 7 men out of 19; however, if these 9 women are added to the 7 men it means that a total of 16 persons out of 62, or 26 percent of those who indicated a preference for college and university work, show CPI protocols which are considerably at variance with norms established for this Inventory.

A composite profile representing the 9 women discussed above is presented in Figure 5. It should be noted that both the elevation and the contour of this profile has some similarity to the one generated by the men in Figure 3, Chapter 3. This composite, for example, has no means above the standard score line of 50, except on Psychological Mindedness and Flexibility. Note should also be made that this outline bears resemblance to the men's profile in that the Self Acceptance and Achievement via Independence scales represent discernible peaks. This composite, therefore--which must not be mistaken for a real personality--is indicative of a type with very little ability to make an impact on groups, for such a person would probably be uneasy among others and would feel out of place in unfamiliar surroundings. Also discernible is a penchant for acquiescing, and a tendency toward self-centeredness, traits which are accentuated by the low scores on Well Being and Sociability. In addition, the low and fairly even line of all scores within the second cluster indicate a minimum of maturity, a lack of control over impulses, and a defensive on temperamental disposition.

The Femininity score in Figure 5 is considerably lower than the one which appears in the men's profile. Such a circumstance probably means

FIGURE 5

PROFILE GENERATED FROM MEAN SCORES OF
9 FEMALE LIBRARY STUDENTS WHO PLAN
TO BE IN HIGHER EDUCATION



that these 9 women have less tendency to be helpful or conscientious, and instead exhibit even stronger qualities of dissatisfaction and touchiness. This being the case, the score on Flexibility, highest of any in the profile, may not reflect a degree of idealism so much as it does an attempt to gain a greater measure of personal pleasure. In quantitative terms, valuable insight can be gained into this composite profile by noting that its Social Maturity score is only 49.376, a score that would place it at approximately the first standard deviation below the mean given in Table 30.

Analysis of Data Pertaining to Single Women

It is well established that unmarried women gravitate in disproportionate numbers toward service occupations, of which education seems to be a favorite. (1:42) Furthermore, available literature (5) testifies to the fact that an unusually high proportion of single women find their way into all kinds of library work. It would seem, therefore, that any study which purports to examine the composition of library staffs should at least recognize this phenomenon and point out some preliminary findings that might in one way or another lead to further research.

As can be seen from the following tabulation, a total of 68 women indicated they were married, divorced, or widowed:

Status	Number
Single	47
Married	51
Widowed	6
Divorced	11

Of the 47 women who were single, 22 indicated they had never worked in a full-time capacity, and further inspection revealed that none of these 22 were over 25 years of age. Of the remaining 25 single women, all of whom had worked, none were under 23 years of age. When all 47 single women were studied to ascertain how they were distributed in the various age categories, it was discovered that 8 were at least 31 years, 10 were between 26 and 30, 12 were between 23 and 25, and 17 were no more than 22. Among the 25 women with work experience, 12 had taught previous to participating in this study while 15 had worked at jobs outside education.

The 25 single women who had held full-time positions were first arranged by their self-rankings on the Satisfaction scale to see whether identifiable groups could be located along this continuum. In doing this, it was found that 4 women, or 16 percent of the sub-sample, had marked no more than "4" on the Satisfaction scale, and that 5 of them, or 20 percent of the sample, had rated themselves with a "10." This means that 16 of the single women who had previously worked, or 64 percent, had placed themselves between 5 and 9 inclusive, thus forming what appears to be a fairly normal distribution.

But if many of these 25 single women indicated little satisfaction with former work, the group as a whole demonstrated rather conclusively that they expected librarianship to be quite rewarding. For example, none of these library students rated themselves less than "7" on the Expectation scale, and 15 of the 25 marked either "8" or "9" while 5 of them placed their expectation at "10." Moreover, this air of optimism carried over to the larger sample, for when all 47 single women were studied it was found that no one gave herself a rating of less than "5" on the Expectation scale.

From such data as these, it becomes important to discover how mean scores which were generated on the 18 CPI scales by these women compare to those produced by married women. Table 33 supplies the answer to this question by profiling the 68 married women who participated in the study and contrasting their 18 CPI scores to those of the 47 unmarried women. From this table it appears that both groups have comparable mean scores on that part of the Inventory dealing with poise, ascendency, and self-assurance, as well as on 4 of the last 6 scales in the CPI. However, the married women have mean scores that are statistically higher on Well Being and on five of the six scales within the cluster. And even more can be detected by careful examination of this table, for even though they are virtually equal to their married counterparts on 7 scales, the only place throughout the entire Inventory on which single women scored higher than married women was on Flexibility.

Such findings might supply some evidence that married women are less concerned than unmarried women about such matters as personal troubles and physical ailments; at the same time, it may also suggest that married women tend to be more optimistic and perhaps even ambitious. Furthermore, the higher elevation on the second cluster of scales would indicate

TABLE 33

MEANS, STANDARD DEVIATIONS, AND "t" SCORES ON
18 CPI SCALES PROFILING FEMALE LIBRARY
STUDENTS WHEN ARRANGED BY
MARITAL STATUS

Marital Status	Married Women N-68		Single Women N-47		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	27.73	6.7	26.72	6.5	1.01	.71
Cs	19.63	3.7	19.66	4.1	.03	.00
Sy	23.70	5.8	22.45	6.1	1.25	1.14
Sp	32.61	7.0	33.59	7.9	.98	- .70
Sa	20.82	4.0	21.17	4.4	.35	- .50
Wb	36.29	4.4	34.49	4.8	1.80	2.05*
Re	34.86	3.4	30.79	4.6	4.07	5.44**
So	39.17	4.9	37.21	5.7	1.96	1.99*
Sc	32.57	6.3	27.08	7.1	5.49	4.32**
To	23.38	4.3	21.23	4.9	2.15	2.52**
Gi	18.26	6.1	15.62	5.2	2.64	2.45**
Cm	25.70	1.7	25.68	1.9	.02	.00
Ac	29.54	3.8	26.91	4.1	2.63	3.46**
Ai	21.67	3.5	20.78	4.3	.89	1.22
Ie	39.23	5.3	37.81	6.1	1.42	1.29
Py	11.82	2.8	11.13	2.9	.69	1.28
Fx	9.22	3.7	10.59	4.3	1.37	-1.84*
Fe	24.07	2.7	23.36	3.2	.71	1.25

*p .05
**p .01 @ d.f.= 113

that married women are more in accord with society's rules and have made its conventions a working part of their own outlook. The higher scores on Achievement via Conformity, when matched with highs on scales in the second cluster, also tend to confirm the greater ability of married women to accomplish more in cooperative effort, mainly by blending their personality with those of the group.

TABLE 34

MEANS, STANDARD DEVIATIONS, AND F SCORES ON 18 CPI SCALES
PROFILING UNMARRIED FEMALE LIBRARY STUDENTS
WHEN ARRANGED BY AGE

Age	22 or Less N-17	23-30 N-22	31 or More N-8	Analysis of Variance
Scale	Means	Means	Means	F Score
Do	26.70	26.90	26.25	0.02
Cs	20.23	19.27	19.50	0.26
Sy	23.47	22.40	20.37	0.70
Sp	35.23	33.31	30.87	0.83
Sa	21.94	20.77	20.62	0.39
Wb	34.23	34.18	35.87	0.39
Re	30.94	29.72	33.37	1.88
So	38.17	37.77	33.62	1.99
Sc	26.00	26.22	31.75	2.19
To	20.94	21.00	22.50	0.30
Gi	14.58	14.72	20.25	4.39*
Cm	25.88	25.81	24.87	0.86
Ac	26.88	26.63	27.75	0.20
Ai	20.76	20.13	22.62	0.96
Ie	38.29	37.31	38.12	0.13
Py	11.47	10.54	12.00	0.94
Fx	10.88	10.86	9.25	0.46
Fe	23.76	22.59	24.62	1.40

*p <.05 d.f.

Because the entire sub-sample of women students contains a total of 47 persons--or almost 41 percent who have not married, it might be asked whether such women would divide into statistical populations if they were arranged by age. Table 34 presents data for these unmarried female library students when arranged in such a manner, but the analysis of variance indicates that no differences of a statistical nature are apparent on any scale except Good Impression. It would appear, then, that this group of unmarried library students have similar CPI profiles when categorized solely on the basis of age. And Table 35 seems to corroborate this finding, since it divides the same group of women by their work experience. Actually, the arrangement in Table 35 is a realignment of ages because the footnote indicates that none of the women without work experience are more than 25 years of age; however, the tabulation is important in that it tends to rule out the impact of employment as an agent in developing attitudes that can be measured by an instrument such as the CPI.

TABLE 35

MEANS, STANDARD DEVIATIONS, AND "t" SCORES ON
18 CPI SCALES PROFILING UNMARRIED
FEMALE LIBRARY STUDENTS WHEN
SEPARATED BY WORK EXPERIENCE

	Single Women Who Have Not Worked(1) N-22		Single Women Who Have Worked(2) N-25		Statistics	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	25.72	7.27	27.60	5.79	1.88	-0.97
Cs	19.63	4.50	19.68	3.[illegible]	.05	-0.08
Sy	22.45	7.04	22.44	[illegible]	.01	0.00
Sp	33.81	9.41	33.40	6.62	.41	0.16
Sa	21.45	4.96	20.92	4.03	.53	0.37
Wb	33.45	5.12	35.40	4.32	1.95	-1.42
Re	30.59	4.80	30.96	4.61	.37	-0.21
So	[illegible].00	6.59	37.40	4.99	.40	-0.23
Sc	[illegible].13	6.41	28.80	7.34	3.67	-1.79*
To	20.13	5.45	22.20	4.43	2.07	-1.43
Gi	14.09	4.15	16.96	5.71	2.87	-1.85*
Cm	25.72	2.05	25.64	1.80	.08	0.17
Ac	26.50	4.23	27.28	4.08	.78	-0.64
Ai	20.27	4.08	21.24	4.58	.97	-0.68
Ie	37.72	6.51	37.88	5.81	.16	-0.10
Py	11.00	2.97	11.24	2.83	.24	-0.23
Fx	10.72	4.81	10.44	3.79	.28	0.31
Fe	23.31	3.41	23.40	3.10	.09	-0.10

*p<.05

(1) None are more than 25 Yrs. Old

(2) All are at least 23 Yrs. Old

More substantial results appear when the 68 married women are compared to the 22 unmarried women who have no full-time work experience. In Table 36 the complete listing of data for these two groups is given, and on the basis of "t" tests this tabulation shows that married women have statistically higher scores on measures that reflect maturity, social responsibility, a sense of well-being, and the ability to accomplish things by working with others. When the 68 married women were compared in the same way to unmarried women with work experience, significant differences appeared on only three scales, namely, Responsibility, Self Control, and Achievement via Conformity.

TABLE 36

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH
COMPARE MARRIED WOMEN STUDENTS TO
SINGLE WOMEN STUDENTS WITHOUT
WORK EXPERIENCE

	Married Women N=68		Single Women No Work Exp. N=22		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	27.73	6.64	25.72	7.27	2.01	1.17
Cs	19.63	3.74	19.63	4.50	.0	.00
Sy	23.70	5.79	22.45	7.04	1.25	.85
Sp	32.61	7.00	33.81	9.41	1.20	- .63
Sa	20.82	4.02	21.45	4.96	.63	- .57
Wb	36.29	4.36	33.45	5.12	2.84	2.55**
Re	34.86	3.42	30.59	4.80	4.27	4.57**
So	39.17	4.93	37.00	6.59	2.17	1.65
Sc	32.57	6.33	25.13	6.41	7.44	4.78**
To	23.38	4.30	20.13	5.45	3.25	2.89**
Gi	18.26	6.09	14.09	4.15	4.17	2.97**
Cm	25.70	1.76	25.72	2.05	.02	.00
Ac	29.54	3.85	26.50	4.23	3.04	3.09**
Ai	21.67	3.50	20.27	4.08	1.40	1.54
Ie	39.23	5.30	37.72	6.51	1.51	1.07
Py	11.82	2.81	11.01	2.97	.82	1.14
Fx	9.22	3.71	10.77	4.81	1.55	-1.61
Fe	24.07	2.72	23.31	3.41	.76	1.11

**p <.01

Another statistical result that sheds at least some light on the personality characteristics of these women was found through use of the social maturity formula. When married women were contrasted to single women with work experience by comparing their respective social maturity scores, a statistical difference occurred which is significant at 5 percent. Yet, while the mean of 51.605, generated by the unmarried women with work experience, is below the married women's mean of 53.130, in absolute terms it is not so far below the mean of Table 30 that this group could be characterized by those adjectives that have been established for low social maturity scorers.

Additional insight was gained by correlating the biographical data of the 25 single women with work experience to personality variables that have been described in previous parts of this report. It was found, for example, that an inverse correlation, r=-.445, existed between the age of these women and their social maturity score. In addition, an inverse correlation was also apparent between the total number of years worked in all occupations and social maturity. On the other hand, a positive correlation, r=.315, existed between the number of years these women had taught and their ratings on the Expectation scale. In summary, then, among the 25 women who had spent at least one year in a full-time job, those having smaller social maturity scores tended to be the ones who had worked the greatest number of years, as well as the women who were oldest in chronological age. Finally, those women who had worked the greatest number of years were expecting the most satisfaction from a career in library work.

In contrast to the women with work experience, the 22 single women who had never held a position showed high correlation, r=.607, between their

Composite Achievement and Social Maturity scores. This same group showed a correlation of .481 between rankings on the Expectation scale and Social Maturity; but, just as was the case among women who had worked, those without work experience had an inverse correlation of -.314 between age and social maturity. These women also had a positive correlation of .476 between their Composite Achievement scores and their Expectation rankings, as well as a similar coefficient, r=.429, between Composite Achievement and the Satisfaction Scale. Another, and final, statistically significant correlation resulted between the self-rankings which these women made of themselves on the Expectation and Satisfaction scales. In this case, a coefficient of .687 indicated rather conclusively that among this group, those who were low scorers on the Satisfaction scale--which in reality was an indication of how well they enjoyed their experience as students--were also low scorers on what they expected in the way of satisfaction from a full-time library position.

The third group of women, i.e., women who classified themselves as either married, divorced, or widowed, also turned up correlation coefficients that are worthy of notice. The 68 women in this sub-sample showed a correlation of .314 between Composite Achievement and Social Maturity, and a rho of .219 when Composite Achievement was matched with the Expectation scale. The age of these women correlated .260 with the Expectation rating, and the number of years which they had taught generated a coefficient of .229 when this variable was tested for association with the Expectation scale. Two other significant correlations were found when data for married women were examined, (1) the Satisfaction scale yielded correlations of .254 when matched with the number of years which these women had taught, and (2) of .219 when tested for association with the Composite Achievement score.

There is yet one other class of female library student that needs to be considered in this study. Women who enter the ranks of librarianship after first spending a number of years in teaching are often asked why they forsake the classroom and choose another type of educational work, especially when remuneration and status are usually greater in teaching situations. It is sometimes thought these women make such a change because over the years they have become dissatisfied with problems involving student contact, classroom preparation, and various academic matters. Because of this it is surmised that many women long for a more secluded atmosphere--one, for example, that is more removed from formal and first-hand contact with educational problems. Such an interpretation, however, might not stand up when viewed in light of the findings presented below, for when correlation tests were made on data supplied by those women who had work experience, as well as those women who had not worked, a number of provocative findings immediately came to light.

Data from the 52 women with teaching experience yielded a correlation coefficient of .461 when the number of years taught was tested for association with Satisfaction. A statistical correlation of this magnitude would indicate that those who had spent the greatest number of years in teaching were the ones who were most satisfied with such work; moreover, this series of tests also showed that these 52 women expected the greatest amount of satisfaction from a future career in librarianship. In addition, data from these former teachers generated several other statistically significant correlations, most of which are as follows:

Variables	rho
Composite Achievement & Social Maturity	.364
Composite Achievement & Expectation Scale	.282
Number of Years Worked & Expectation	.270
Expectation Scale & Women's Age	.258
Satisfaction Scale & Women's Age	.328
Satisfaction Scale & Expectation Scale	.367
Satisfaction Scale & Number of Years in Teaching	.461
Satisfaction Scale & Number of Years Worked in All Occupations	.473

On the other hand, women who had worked at full-time jobs in fields other than teaching, showed an inverse correlation, (r=-.453), between the number of years worked and scores on Social Maturity. And, another statistical correlation was obtained in this series of tests that showed an inverse association; viz., age of these students and Social Maturity, the exact coefficient being -.197. One positive association was found, (r=.284), between the Expectation scale and the Composite Achievement score.

SUMMARY

A total of 115 women participated in this investigation. In comparison to the 35 men of the study, the clearest contrasts which the women library students developed on the California Psychological Inventory concerned the first two divisions of the CPI and a single scale called Femininity. Although the author of the CPI has concluded that large, unselected samples of women typically have mean scores on Femininity which are 7 points higher than those usually found among large groups of men, the male library science students of this investigation were unique in that they registered a higher score on this scale than did the women. The contrasting standard scores on the first 12 scales of the CPI were equally clear, for the men had higher means on the first six scales--or that part of the test dealing with poise, ascendency and self-assurance--while women had larger averages on each of the following six scales, i.e., those relating to maturity, socialization, and responsibility.

Composite mean scores and standard deviations were generated from those data on page 35 of the CPI Manual which was originally produced by Social Work Graduate Students, Psychology Graduate Students, Airline Hostesses, and Nurses. The 115 female library students of this investigation were then compared to this composite by performing a "t" test on each of the Inventory's 18 scales. This series of tests indicated that the library students had significantly lower scores on 9 of the 18 scales. In no case, except Femininity, did the women library students have a significantly higher score, although the Composite did have slightly lower means on the Responsibility, Socialization, and Communality scales. In a separate comparison, and notwithstanding possible age factors, 2,120 college women students were found to be statistically higher than the librarians on 7 of the 18 scales; moreover, the college students had higher means, though not to a significant degree, on 7 additional scales. Further tests which utilized the student "t," demonstrated that psychology students, social work students, and airline hostesses all had higher means than the librarians on a substantial number of scales. In a fifth test, the 115 library students were found to have mean scores which nearly approximated those of the nurses that are delineated in the CPI Manual.

When the entire sample of 115 female library students was examined, statistically significant--though relatively weak--correlation was found between rankings on the Satisfaction scale and the Composite Achievement scores. This same type of test also revealed a correlation between the number of years which these women had taught and rankings on the Satisfaction scale. At the same time, there was an inverse correlation between these same rankings and the number of years that the 115 library students had worked at full-time jobs outside the field of education. In other words, the more these women had taught the more satisfaction they realized from it; conversely, the more years these women worked in occupations other than teaching, the less satisfaction they realized from it.

Because the satisfaction that one receives from his experience as a student might not be identical to that which one realizes from a full-time, self-supporting job, it was felt necessary to examine data from only the 81 female library students who indicated they had worked in a full-time capacity prior to entering library school. Such women proved to have a positive correlation between rankings on the Satisfaction and Expectation scale, as well as a significant association--r=.339--between the number of years they had taught and the satisfaction they derived from such work. Upon completion of these tests, this sub-sample of 81 students was further reduced to 52 so that only women with classroom teaching experience could be studied. When this group was studied a correlation of .461 was found to exist between rankings on the Satisfaction scale and the number of years these 52 women had worked. From this, the evidence seemed rather conclusive that those women who indicated they had taught the longest were the ones who ranked themselves highest on the questionnaire's Satisfaction scale.

The overwhelming majority of the 115 women in this study indicated on an Expectation rating scale that they felt library work would give them considerable satisfaction. Using a scale of 1 to 10 as a continuum in which "1" represented dissatisfaction and "10" was indicative of high satisfaction, 64 percent of the 115 library students marked "10." Even more important, however, was the fact that identifiable clusters of students were found along this continuum, each of which had mean scores on several CPI scales that consistently yielded statistical differences.

Those, for example, who expressed high expectations from library work had larger means on 13 of the 18 CPI scales than did those with low expectancy ratings. Furthermore, the 18 students who comprised the low raters on Expectation formed a composite profile that could be identified and appraised. In addition, this Expectation scale also proved useful because it correlated significantly with 12 of the CPI scales. And, as a final test in this series, it was found that those who had taught the longest, were the ones who tended to expect the most from librarianship, for the Expectation scale correlated significantly with both of these variables.

As an occupational group, the 115 female library science students appeared to generate a social maturity mean that is not different from mean scores found among other samples of women in the CPI Manual. The mean of 52.57 which was scored by the women librarians placed them, as an occupational group, fifth in an array of six occupations. Such a finding, however, does not demonstrate anything conclusive, for the occupation that placed sixth was that of Airline Hostesses--a much sought after occupation with a very favorable image in the American social order. Of greater consequence is the fact that social maturity scores generated by the 115 library students not only correlated significantly with rankings on the Expectation scale, but they also showed association (p .005) with the Composite Achievement score. And, finally, students were grouped according to self-rankings on the Expectation scale in such a way that they could be identified as "low," "middle," and "high" scorers. The social maturity scores generated by each of these groups were found to be (1) 50.505; (2) 52.915; and (3) 53.025. When these scores were tested by analysis of variance, an F score of 4.12 was generated which, with 2 and 112 degrees of freedom, has significance beyond .05 probability of error.

Of the 115 women participating in this study, 43 indicated they hoped to take positions in college or university libraries. After means and standard deviations on each of the 18 CPI scales had been determined for this group, such data were compared to the composite means which had been generated from the test manual. In tests utilizing the student "t," the 43 female library students proved to have mean scores that were significantly lower on 12 of the 18 scales found in the composite. Furthermore, these differences formed a pattern, for they included all scales relating to poise, ascendency, and self-assurance, all scales pertaining to achievement orientation, and the two scales labeled Psychological Mindedness and Flexibility. A familiar finding appeared on the Femininity scale, however, for the librarians again outscored the composite on this measure of gentleness, nurturance, and touchiness.

On the basis of profile inspection, it appeared that nine of the 43 women who indicated an interest in higher education manifested some problems in adjustment. When these 9 women were added to the 7 men of Chapter 3 who also demonstrated certain personality difficulties, it meant that out of 62 potential librarians who are interested in college positions 16 manifest characteristics which set them apart from well-adjusted and socially mature individuals. This investigation did not attempt to determine whether such a proportion was comparable to the number of people in other occupations with various adjustment difficulties.

There were 25 unmarried women participating in this study who had not held full-time jobs. While self-ratings which these women made for themselves on the Satisfaction scale seemed to form a normal distribution, the students nevertheless had uniformly high expectations of library work. As far as scores on the CPI were concerned, the single women who had not worked had profiles that were similar to those of single women who had held positions. Both of these sub-groups, however, scored lower than the 68 married women of this study on all but three of the CPI scales. Moreover, the married group was comparatively high on that part of the test which deals with socialization, maturity, and responsibility. The married women also showed positive correlations between the number of years they had taught and the Expectation scale, as well as significant correlation between the number of years taught and the satisfaction they derived from such work. Finally, association with $p < .05$ was found between the age of this sub-sample and the self-rankings on the Expectation scale.

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CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Even a cursory examination of the literature will reveal that a large percentage of persons who hold professional positions in American libraries once had employment in some other occupation. At the same time, and despite the fact that credentials for entry into the library field are not easy to procure, librarianship seldom affords either remuneration or status typically associated with success in these former lines of work. Insofar as college and university librarianship is concerned, such a circumstance is especially paradoxical, for remuneration and status connected with this work is not only inferior to that of former positions, but in the social hierarchy of campus life, the standing of a librarian is several degrees below that of most academic personnel.

This, of course, would not seem so remarkable if librarianship led to greater mobility in educational schematics, for library positions would then simply be considered as desirable training for potential academicians. Or, such a paradox might be less difficult to understand if librarians as a group did not possess credentials which are equivalent to--and sometimes superior to--a large proportion of college and university teachers, since it would then be clear that librarians were both quantitatively and qualitatively inferior to other educators in a critical area of academic sensitivity. But none of these conditions are in force, and because of this fact, little more than speculation surrounds the question of why persons with an amount of formal training which far exceeds that of the general population will leave positions in their primary field of interest and turn to a type of work that affords fewer social and economic advantages.

A complicating factor in this paradox is the inescapable fact that even before entering the field, those going into academic library work know they probably will not be participating in the dominant value of the campus; namely, teaching. This too seems troublesome, for librarians come in large numbers from the classroom, and on that basis alone they must know that library positions involve a decided step down in salary and status. Therefore, it may be reasonable to suppose that some extraneous force may be impinging upon the thinking of persons who wish to enter the field of library science, some force that is strong enough to cause an adult who has been making his own way in the world to conclude that certain considerations in his life are more important than the disadvantages of less pay and lower status.

One clue as to what these considerations may be is found in a small body of literature which hints that librarians tend to manifest certain personality traits not unlike those of teachers who leave the field of education. While it is not clear why teacher turnover is as high as it appears to be, various research reports do show that many educators leave the classroom because of conflict situations with which they cannot cope. The variety of conditions to which a teacher must adjust during the course of an academic year is, of course, considerable, and when such pressures become too great the response of many is simply to vacate the scene. In addition, several writers have shown that a number of teachers manifest feelings of inferiority and self-consciousness to the extent that such traits prevent a proper adjustment to difficult situations and various types of problems.

By the same token, a limited amount of research has found that many librarians are often uninterested in their work. When armed with the knowledge that a substantial proportion of these people first worked in another occupation, a conclusion such as this might not be too startling; but, when followed by the equally important finding that librarians are often lacking in forceful personality traits, it is but a short step to the question of whether a significant number of persons actually perceive the library as a place where they can escape conflict or competitive situations. At least one piece of research points up this question, for a sizable percentage of librarians in Bryan's investigation indicated they originally preferred, and sometimes even attempted, a career in fields where competition is a characteristic.

In summary, then, there is a small accumulation of evidence that paints at least a preliminary picture of librarianship as an occupation in which an identifiable group has already changed occupations and now finds themselves less than preoccupied with present work. In addition, it would appear that the field of librarianship also has a considerable number of workers whose personalities must be characterized as something other than dynamic, and who probably feel their considerable abilities are not being fully utilized. Finally, and perhaps most importantly, if these people are working in an academic library, they may feel their role in the total work of the campus is somehow separate from the main function of the enterprise.

The purpose of this investigation, then, was to determine whether distinctive personality traits could be found among students of library science at one Midwestern university. More specifically, the study attempted to determine whether statistically significant differences would appear on various scales of the California Psychological Inventory when accumulated data from that instrument was matched to biographical information gathered by means of a specially designed questionnaire. As a focal point for carrying out this investigation, the following hypothesis was tested: There are significant measurable differences in patterns of personality variables which relate to biographical data of library science students.

Data for this investigation was collected from 150 full-time students enrolled in the School of Library Science at the University of Oklahoma during the summer session of 1967. Because the faculty at this university placed regularly scheduled classes at the disposal of this investigation, all students enrolled during the summer session indicated were available to participate as subjects. Each student anonymously completed the entire California Psychological Inventory as well as a 10-point questionnaire, both of which were distributed to the respondents in a packet. The point that the students need not identify themselves in any way was particularly stressed, and to encourage anonymity further, instructions were given for each person merely to place both instruments in a sealed envelope which had been originally supplied as part of the packet. Upon return of the Inventory and questionnaire, necessary scoring was completed, after which the results were transferred to punched cards for analyzation by means of electronic tabulating equipment.

Although this investigation accepted the premise that no personality can be reduced to numbers, the study did rely heavily on statistical tools for analyzing the data. And because preliminary measurements indicated that a normally distributed population was present, statistical analyses depended entirely on parametric procedures. Accordingly, the tools used in this study were (1) the analysis of variance for determining differences simultaneously among sets of three or more means, (2) the student "t" test for differentiating differences between pairs of scores, and (3) the Pearson Product Moment Correlation test for ascertaining association between variables of a continuous nature. The results of such tests were usually reported in exact scores with statistical probabilities given as found in commonly-used tables.

Summary of Findings

Of the 150 students who participated in this investigation, 35 were men and 115 were women. Among other things, the questionnaire was intended to ascertain approximate ages of the respondents by having them check categories representing a short span of years. From such returns it was found that in general these students were older than most persons who attend college for acquiring degrees which enable them to begin an entirely new occupation. Twenty-five of the 35 men, for example, were at least 26 years old, and 25 of them had held a full-time job before entering library school, of which 11 had been in teaching.

Among the 115 women, a plurality was over 40 years old, and 81 of them had been employed in full-time positions previous to participating in this study. Of the 81 women with work experience, a total of 52 were former teachers. Such data is in keeping with previous findings and provides further evidence that library students not only are relatively advanced in age, but that as many persons come to the field of library science after having served as teachers as from all other occupations combined.

As a preliminary step in determining how the 35 male library students compared on separate CPI scales to men in other lines of work, data was compiled on 14 occupational groups listed in the CPI Manual so that a set of composite means and standard deviations could be used for testing. Upon completion of this task, a series of "t" tests was conducted which revealed that male library students had smaller means on 17 of the Inventory's 18 scales. Furthermore, a total of 12 of these 17 scales represented differences that were statistically significant at either the .05 or .01 level of probability. When the female library students were similarly compared to data from the Manual, findings comparable to those of the men were readily apparent. In this case, composite scores were again statistically higher on 12 of the 18 scales, with differences particularly noticeable on that part of the Inventory which deals with poise, ascendency, and self-assurance, as well as on the three scales that measure academic orientation and the efficiency with which one makes use of his intellect.

The 150 library students did, however, score higher than the composite on Femininity. This greater mean score was found among both men and women samples although it was most noticeable with the men, for they generated a standard score on Femininity which reached a higher elevation than even that of the women. On such a basis, it would seem that both men and women appear to be inclined toward helpfulness, sympathy, and respectfulness, with such characteristics--at least in comparison to unselected samples of males--particularly strong among the men. No less important was the finding that women exhibited lower scores than men on the first six scales of the CPI, while the men produced lower scores than women on the second set of six scales.

A further comparison of how men and women library students performed on the Inventory was possible by examining their respective Standard scores. From a study of these data, it would appear that men scored comparatively high on Social Presence and Self-Acceptance, and in relation to the women had higher profile elevations on each of the scales that measure ascendency and the ability to gain status in interpersonal contacts. On the other hand, the women had significantly higher scores on Responsibility, as well as larger means than the men--though not statistically greater--on each of the other scales which measure how well a person can internalize the rules and values of the society. In conclusion, there was virtually no difference in scores on any of the other scales except, as already mentioned, Femininity.

It is rather well established that selective personality factors do play a large part in determining the occupation of given individuals. Therefore, it was not surprising that the 35 male library students of this study contrasted sharply with various occupational data included in the CPI Manual. In a series of "t" tests with each of the 14 occupations listed in the Manual, for example, it was found that male librarians had mean scores that were similar to first-line business executives, correctional officers, machine operators, and architects; however, these same 35 library students had mean scores that were statistically below those of salesmen, social work graduate students, research scientists, practicing dentists, and medical school applicants.

The women students, for their part, presented profiles that were similar to those of nurses; but, at the same time they were significantly below most scores generated by samples of social work graduate students, airline hostesses, and psychology graduate students. Throughout all these comparisons, an important point was revealed in the fact that library students consistently proved to have higher mean scores on Femininity than any other occupational group except architects.

The real meaning behind such differences is not as easy to ascertain as might first appear. It should not be inferred, for example, that all librarians are necessarily inferior to all salesmen, or that librarians as a class are less competent than medical school applicants. It is more likely that distinctive characteristics are part of a successful salesman's make-up, and any individual who does not possess such traits--one of which is a talent for advancing himself and his product--will hardly be content in this line of work. One manifestation of a salesman's talent for advancing his product is found in the necessity to be articulate and sure of himself, while at the same time being careful to conceal whatever preoccupations he may have with personal problems and ailments. But though such traits may be crucial to successful salesmanship, they may be of less importance in other occupations; indeed, data showed that library students in this study evinced characteristics that are quite different, for as a group they generated profiles which indicated a tendency to accept authority, to be more obliging, and to be less concerned about articulation for the sake of gaining status.

Because previous work experience seems to be a common element in the background of most librarians, the 35 men students of this study were arranged by the number of years they had held full-time, self-supporting jobs and their 18 mean scores were compared accordingly. In carrying out such tests, it was found that on the first 6 scales of the Inventory those men who had worked at least six years scored higher than men who had no work experience. On the other hand, men without work experience scored higher on the second set of six scales, and no distinguishable differences were apparent on the two final parts of the Inventory. Among the women, this tendency toward higher scores among those with work experience seemed even more pronounced, for analysis of variance indicated that as the number-of-years-worked increased, the mean scores grew accordingly. These differences, moreover, were particularly strong on those scales that deal with socialization, maturity, and responsibility; a fact which may point to the conclusion that the longer a person successfully holds a full-time position, the more he has to internalize the constraints and expectations of society.

Yet another finding of importance was identified when students were separated by the number of years they had worked. Higher mean scores on the CPI scales were usually found among those with work experience; however, both men and women showed an inverse correlation between ratings on the Satisfaction scale and the number of years these students had worked at occupations outside the field of teaching. While this correlation was just under the significance level insofar as data relative to the 35 men were concerned, the coefficient did exceed the critical point when applied to the women. Moreover, this finding was given added emphasis by the fact that when only women with actual work experience were examined, a statistically significant inverse correlation also appeared between the number of years worked in all occupations and their social maturity scores.

Persons engaged in any profession are anxious to see new talent with exceptional potential enter the field. This typically means that recruits are sought who have a healthy outlook on a wide assortment of matters and who are able to find work satisfaction in a variety of circumstances. In attempting to assess the reasons why library students left other occupations and turned to librarianship, this question took on particular importance; consequently, the present study incorporated a rating scale into its questionnaire that gave respondents an opportunity to indicate the degree of satisfaction they derived from former work. This scale, which was intended to represent a continuum of minimum to maximum satisfaction, was made up of 10 points, with "1" indicative of dissatisfaction and "10" corresponding to a high degree of satisfaction.

In making self-evaluations on this rating scale, 15 of the 35 men checked either 8, 9, or 10 as the amount of satisfaction they experienced in their former occupation. Fourteen of the male students marked 5, 6, or 7, and a total of six men rated themselves at either 2, 3, or 4. The 6 who checked "2-4" comprised a group which, when compared to those who checked "5-7," scored lower on 17 of the 18 CPI scales. Interestingly enough, the one scale on which this low-satisfaction group scored higher was Femininity. As far as the women of this study were concerned, 18 percent of them marked "10" and 10 percent ranked themselves no higher than "4." On this basis it was found that those women who were most satisfied with former work had higher CPI scales on all but 3 scales throughout the second and third cluster--or parts--of the Inventory. From this, then, the indication would be that women who were least satisfied with former employment tended to have less maturity, socialization, and ability to make efficient use of intellectual resources.

In view of this, the inverse correlation between number of years worked in fields other than teaching and ratings on the Satisfaction scale may take on an air of genuine importance. Moreover, this sense of importance may be heightened by the fact that self-ratings on the Satisfaction scale seemed to have a certain predictability with other biographical data usually deemed important for success in life situations. All 115 women, for example, had a positive correlation with $p < .05$, when Satisfaction ratings were tested for association with Composite Achievement, and a positive coefficient of correlation also resulted when Satisfaction was matched with the number of years these women had taught. Furthermore, the men also showed similar findings in the direction of such tests even though the coefficients which were yielded fell short of statistical significance.

Another important component of the questionnaire was the rating scale that was devised so some insight could be gained into the amount of satfaction these 150 students expected from a career in librarianship. This scale was structured exactly like the Satisfaction continuum described above and respondents checked it in identical fashion. On tabulating the returns, it was found that a total of 24 male library students marked the Expectation scale at a point no lower than 8, while only 3 students marked it no higher than 5. Similarly, 64 percent of the women marked either 9 or 10 on Expectation while a total of only 5 percent placed their expectancy level at 6 or lower. In passing, it is interesting to note that while 26 women ranked themselves no higher than 5 on the Satisfaction scale, only 4 marked the Expectation scale in the same manner.

When men students were categorized along the Expectation scale by such groups as "2-6," "7-8," and "9-10;" it was clear that the "2-6" sample scored below the "9-10" group on 14 of the 18 CPI scales. Moreover, by arranging women students in comparable sub-samples, it was discovered that statistical differences favoring those higher on the Expectation scale were present on 12 out of 18 scales. Nor was this the end of the matter, for such considerable differences also formed definite patterns within the profile. For example, men who were high on Expectation had significantly greater mean scores on all scales dealing with academic orientation, industry, and resourcefulness; and, this group had statistically higher mean scores on 4 of the 6 scales in each of the first two parts of the Inventory. In the case of the female library students, these patterns were virtually identical, thus indicating that one's perception of a new occupational experience may be reflected in his poise and ascendency, as well as in his overall maturity and social responsibility.

A total of 18 female library students were identified by means of the Expectation scale as not overly optimistic about the satisfaction they will receive from a career in library science. These 18, all of whom rated themselves between 3 and 7, generated data that, when sketched on a profile sheet, clearly indicate a person with qualities of defensiveness, low ambition, little self-confidence, and a strong desire to work alone. What makes this circumstance all the more remarkable is that composite profiles typically level off high and low scores which give color to real personalities. The 38 women who comprised the "10" group on Expectation, for example, presented a modal personality with little that distinguished them.

Most psychologists feel that a wholesome personality tends to be optimistic and expectant about matters which affect him so acutely as his occupation. Conversely, they would say that the less healthy personality could be expected to feel gloomy about his chances in the work-a-day world. One should not be surprised, then, that the students of this study who met such a description reflected this circumstance in their CPI scores. But, if one expects those with little optimism to have profiles with low elevations, it becomes all the more significant to point out that library students in this study who were the most satisfied with former work, and who were also expecting the most from librarianship, failed to generate mean scores on any of the CPI scales--except perhaps Femininity--that were statistically higher than the composite means drawn from the Inventory's Manual.

Because the Expectation scale seemed to have certain powers of predictability, it became important to discover how ratings on this continuum correlated with other biographical data from the questionnaire. In general, the men showed an inverse correlation between their expectation ratings and the number of years they worked, while the women presented positive correlations between these same two variables. From what has been reported here, one would suspect that positive correlations exist between ratings on the Satisfaction and Expectation scales. While this was indeed the case, the women did indicate such an association more strongly, since their coefficient of correlation yielded significance at $p < .01$ while the men generated a level of association that was significant at .05 but not at .025.

The Composite Achievement score, which it will be remembered is a synthesis of standard scores on Achievement via Conformity, Achievement via Independence, and Intellectual Efficiency, also correlated with rankings on the Expectation scale. With the 35 male library students, such correlation proved to be .418, $p < .01$; and among the 115 women there was an association between these two variables of .277.

The Expectation continuum also proved to be of use when it was correlated with the 18 scales of the Inventory. In matching these data, both

CORRELATION COEFFICIENTS BETWEEN EXPECTATION RANKINGS AND SCORES ON THE CPI

Scale	Men	Women
Do	----	.328
Cs	.358	.273
Sy	.387	.351
Sp	.333	.199
Sa	.319	.290
Wb	.441	.317
Re	.450	.270
So	.404	.257
To	.425	.265
Cm	.325	.360
Ac	.386	.378
Ai	.364	----
Ie	.381	.249

men and women students developed significant correlation coefficients on 12 CPI scales, and interestingly enough they formed similar patterns of association. The exact scales and coefficients which proved to be statistically significant are listed in the foregoing tabulation, and in this resumé care should be taken to note how many times both men and women students had significant correlations on identical scales.

From this table it is clear that the only scales which do not show significant association for both sexes are Dominance and Achievement via Independence. Such a compilation lends a good deal of evidence to the supposition that the less these men and women felt library work would give them satisfaction, the lower was their score on the above 12 scales from the CPI. Conversely, with the same degree of assurance, it was possible to predict that those scoring high on the Expectation scale were correspondingly high on the 12 scales in this tabulation.

The Social Maturity scale is a formula developed by Harrison Gough, author of the CPI, to assist in the identification of individuals who manifest higher and lower levels of interpersonal and interactional behavior. Because such a formula seemed to hold considerable promise in the work of this investigation, a social maturity score was generated for each of the study's 150 respondents. Upon completion of this task, the individual scores, as well as mean scores which had been produced by sub-samples derived from the questionnaire, were analyzed. Among the 35 male students a mean of 50.237 was found, while among the 115 women a Social Maturity average of 52.574 appeared. At first glance such differences would appear considerable, but actually they conform rather closely to what is expected on the basis of large and unselected samples -- it has, for example, been found that women tend to be more law-abiding, more sensitive to cues, and more elaborate in role-taking situations.

When both men and women students were separated into categorizations made possible by the Expectation scale, i.e., "3-7," "8-9," and "10" for the women; and "2-6," "7-8," and "9-10" for the men; an analysis of variance showed that both sexes had Social Maturity mean scores among these groupings that were significantly different. Through an extensive use of adjective checklists, it has been ascertained that persons who score approximately one standard deviation below the norm mean can typically be thought of as erratic, impulsive, weak, nervous, and distractible. An interesting point about the differences that occurred when students were arranged by their Expectation ratings is that the "2-6" male sample had a mean of 45.83 and the "3-7" female sample had a mean of 50.50, both of which are virtually on the cut-off point at which such adjectives begin to have real meaning. No less important is the fact that women students who rated themselves at "10" on the Expectation scale had a Social Maturity mean of 53.025, while men with identical rankings had 52.064. Neither of these scores is a truly high score in the sense that they approach the assigned levels of 56 and 57, or points which classify men and women respectively as organized, stable, and idealistic.

Social Maturity scores and Expectation rankings were also useful in that they could easily be correlated. When such data for the 35 males were analyzed in this manner, a strong association--r=.568--was found to exist, and when scores for the 115 female library students were tested in the same way another significant correlation, r=.259, resulted. On the basis of these data, then, it would appear that a strong tendency existed for Social Maturity scores to become larger among students who expected greater amounts of satisfaction from a career in librarianship.

Such findings may have implications, which are quite pragmatic, for, as stated earlier, in life situations a male with a Social Maturity score of at least 56 can generally be characterized as dependable, wholesome, clear-thinking, and stable. With such a definition at hand, the initial tendency is to generalize by saying that the more stable, clear-thinking, and rational these students were, the more they expected in the way of satisfaction from a library position. Caution must be injected here, however, for just one of the male library students, and only 8 out of 115 female students, had scores of 56 and 57, respectively; consequently, only a comparative few would fully qualify as deserving such adjectives.

Social Maturity scores also showed significant results when they were correlated to the Composite Achievement data of this investigation. Among the males these two sets of scores had strong association, for an actual test resulted in r=.643; moreover, when these data were similarly compared for women samples the same two variables proved to have a correlation of .390. Because both of these coefficients have $p < .01$, there is every reason to believe that as Social Maturity among these students increased, their combined standard score on the achievement potential part of the CPI grew accordingly.

The Social Maturity formula has been used extensively in various investigations that are reported in the literature. Because it has proved to be of value in identifying certain characteristics among groups as well as individuals, there is a possibility that this formula might have power to differentiate library science students when arranged by sub-samples from the questionnaire. Accordingly, the 115 women and the 35 men students were individually sorted by (1) the number of years worked, (2) their ages (3) the types of libraries in which they hope to work, and (4) their rankings on the Satisfaction scale. Among the groups within each of these four categorizations, however, only small and statistically insignificant Social Maturity mean scores were found; therefore, the only conclusion possible is that on the basis of these data, the 150 students who participated in this investigation did not manifest different degrees of maturity when arranged in the described manner.

While the original motivation behind this investigation grew out of a concern to know more about persons working in academic libraries, available resources made it almost impossible to carry out an entire study limited to those in this single area of librarianship. However, considerable attention was paid to students who expressed an interest in pursuing a career at the college and university level; and, with this in mind it was discovered that 19 of the study's 35 men, and 43 of its women, were hoping to work in college libraries. When "t" tests were used to compare the CPI mean scores of these 19 men to those of the Manual's Composite, it was found that library students had significantly lower mean scores on 11 of the 18 scales. Similarly, the 43 women had mean scores that were lower than the Manual's Composite on 12 of the 18 scales; yet, in both cases, the men and women library students scored significantly higher than the Composite profile on Femininity.

On the other hand, there was insufficient evidence to demonstrate that these potential college and university librarians scored lower on the CPI than did their fellow students who hoped to work in other types of libraries. When intra-grouping of all 150 students was done by arranging them according to type of library in which they planned to work, no statistical differences among the CPI scales could be found. Even so, a number of low scorers were present among these future college librarians, and individual inspection of separate profile sheets indicated that 7 out of the 19 men who hope to be in higher education, as well as 9 of the 43 women with comparable expectations, produced configurations indicative of certain difficulties which the CPI delineates. This would mean that a total of 16 students out of 62, or 26 percent, were hoping to enter the ranks of college and university library work who had scores on this particular inventory that would be cause for concern.

In summary, data found in this study makes it clear that none of the sub-samples, whether male or female, generated means that resulted in group profiles with high elevations. In fact, none of the sub-samples--not even those that were made up of students who were most satisfied with former work or who seemed most optimistic about a library career--had higher means than the composite profile that was assembled from 14 occupational groups in the Manual. However, such samples as the "9-10" Expectation groups and the students who marked "9-10" on the Satisfaction scale can be said to have scored relatively high on various scales; and, in addition, there is one scale on which the library students did have consistently high scores: Femininity. While virtually all 150 students in this study had strong scores on this particular scale, they were particularly high among both men and women who (1) indicated little satisfaction with former work, and (2) expected only a modest amount of satisfaction when they began a full-time library assignment.

High scores on Femininity among library students have a number of rather interesting ramifications. Among male subjects generally, a high Femininity score is typically associated with negative connotations, while high scores among women is usually thought to be desirable. Keeping in mind that Femininity has other meanings when used in a context of the CPI than it does when applied to everyday speech, data which the 35 men of this study accumulated on this scale nevertheless suggests that they are not strongly inclined toward innovation or experimentation. At one end of the Femininity continuum is found a type who seeks action, change, and the means for getting things done. At the other extreme, Femininity delineates a trait which is concerned with nurturing the status quo, keeping things on an even keel, and not being overly agressive.

In this setting, the fact that virtually all male library students had Femininity scores which exceeded a standard score of 50 may have real meaning. In addition, six male students indicated their former work satisfaction could be ranked no higher than "4," and these men had a Femininity standard score of at least 60, or one sigma above the mean. The 19 men who indicated a preference for academic library work had a standard score of at least 55; and, when the Satisfaction ratings of all 35 men were correlated with Femininity scores, an inverse association, r=-.287, was found to exist. Such would indicate that, among those participating in this study, the CPI scores on the Femininity scale increased as the degree of job satisfaction decreased.

The 115 women of this investigation had a mean raw score on Femininity that would correspond to a standard score of approximately 51. This would mean that the female library students failed to distinguish themselves on a scale where high scores among women is desirable; therefore, these students probably represent a personological middle-ground which neither goes too far in any direction that is descriptive of generosity, self-control, maturity, dissatisfaction, self-centeredness, nurturance, or coarseness. In absolute terms, of course, both sexes are well within a range of normality; however, the men do present the more interesting profile because they not only outscored a large sample of American men in an international study, but they even showed higher scores on Femininity than the women themselves. As a final note on this point, tentative findings from various studies now give some indication that CPI Femininity scores have an inverse correlation with intelligence test scores among men and a positive correlation among women.

Earlier in this chapter, mention was made that virtually as many persons go into library science from the field of teaching as from all other occupations combined. On the basis of this, one might conclude that a careful study of those with teaching experience would reveal pertinent background information on why certain types want to leave the classroom and become librarians. The men and women of this investigation who had teaching experience differed from the overall Composite profile in that both sexes had smaller mean scores on at least 12 of the CPI scales. When only the 52 women with teaching experience were studied separately, correlation tests indicated a positive association, r=.461, between the number of years they had taught and satisfaction from such experience. On yet another test involving the number of years they had taught, data for these same women indicated a correlation coefficient of .380 between this variable and their chronological age. The men, for their part, showed rather consistent inverse correlations between ratings on either satisfaction or expectation scales and the number of years spent in full-time work.

The final examination of sub-samples conducted in this investigation pertained to the marital status of its female library students. CPI data for the married women of this investigation were first compared through "t" tests to that of all unmarried women, and on the basis of these results it appeared that the married women had higher mean scores on Well Being as well as on 5 of the 6 scales in the maturity and social responsibility part of the Inventory. Interestingly enough, however, the single women did score higher on Flexibility, for their standard score of approximately 55 compared to an even 50 for the married women. Such differences may indicate that these single women as a group are more imaginative, pleasure seeking, and individualistic while the married women tend more toward a greater blend of cautiousness, conservativeness, possible rigidity, sociability, perseverence, and sincerity. The differences on scales in other parts of the Inventory, however, point to the conclusion that married women appear to be more optimistic--perhaps even ambitious--and that they seem to be more in harmony with society's constraints and expectations.

The Social Maturity formula that was discussed earlier was also used for analyzing data generated by women of different marital status. Because the Social Maturity scores for each of these sub-samples easily fell within the modal range, neither the married nor the unmarried women presented data that could be characterized as unusual. While it is true that the married women's score of 53.13 was somewhat higher than the single women's mean of 51.77, such averages are not really close to the point where adjectives can be used that describe scores of 46 and 57. The Social Maturity scores did reveal, however, that among all single women in this examination an inverse correlation existed between age and Social Maturity; furthermore, this correlation was even stronger among those unmarried women with work experience than among those single women who had not yet held a full-time position. And of equal interest was the finding that among the 25 single women who had held jobs, there was an inverse correlation between the number of years worked and their Social Maturity scores.

Conclusions

An obvious fact which comes out of this investigation is that participating students were similar in age and work experience to those reported in other studies on library personnel. Such a circumstance, of course, is important only because such people, as a generalization, are changing occupations and starting a new career; and because of this, the question is once again brought up as to why so many library students become attracted to this field only after they have first worked in some other vocation, particularly teaching.

But of far more importance than age--or even work experience--are data on these students which indicate that on the California Psychological Inventory, they did not measure up to a compilation of scores derived from 14 occupational groups which are listed in the CPI Manual. Merely scoring high on discrete scales, of course, is not the purpose of the Inventory; in fact, if an investigator specifically wants to identify women who exhibit zest and spontaneity, a raw score of only 25 on Self-Control is perhaps ideal. But from data presented here, one must come to the conclusion that these 150 library students, as a group, presented few outstanding personality characteristics, and particularly when compared to scores indicative of traits that are typically found among persons in such glamor professions as medicine, dentistry, and research.

It must be reiterated, of course, that smaller mean scores are in no way tantamount to successful or unsuccessful workers in the field of librarianship. It is possible that the most successful librarian might have scores on this personality inventory that would place him several points below a medical doctor on the same profile sheet. And it is also possible that a library's clientele may both expect and appreciate a reception from a personality that can be characterized as conservative, calm, and appreciative. The fact, then, that most of the data here paints a picture of 150 library science students who are something other than forceful, progressive, and resourceful is not necessarily to be taken as an unmitigated affliction.

A generalization which seems valid is that insofar as differences could be found between the 35 men and the 115 women of this study, the men exhibit more poise and self-assurance while the women appear to be more conscientious and self-controlled. While such a finding is probably what any observer of librarians would expect, a question that all interested persons might ponder is whether both sexes manifest not enough of the former qualities and too much of the latter. It may be, for example, that the lack of status and remuneration referred to earlier in this report is at least one out-come of a constellation of personality characteristics which may be labeled appreciative, conscientious, and conservative.

But even more significant than comparative scores between the sexes is the satisfaction which these students experienced in former work situations. For example, it may be seriously contended that librarians as a group should be conscientious and self-controlled, but it is doubtful if any profession will ever rise too high if a substantial percentage of its recruits characterize themselves as dissatisfied. And this takes on even added meaning when it is remembered that these data provide considerable evidence for believing that those who were most dissatisfied also projected the lowest profiles on the Inventory. Furthermore, the Social Maturity scores also reflected this feeling of dissatisfaction, since women who were least satisfied with their former work tended to be the lowest on both Social Maturity and Composite Achievement scores.

Now, one would expect dissatisfied persons to desire a change of occupation, but certain pieces of data embodied in this report indicate that individuals may be so dissatisfied with former work that this actually prevents them from being able to expect genuine satisfaction in a subsequent career. While the present study did not actually explore this question, tests of correlation did show an association between former job satisfaction and the satisfactions these students expect once they have assumed a full-time library position. Nor was this all that such correlation tests showed, because these Expectation ratings also had statistically significant associations with both Social

Maturity and Composite Achievement scores. And, interestingly enough, clusters of students who could be identified as not very optimistic about future job satisfaction consistently presented lower mean scores than did those who were more expectant about work in the library field.

The conclusion, then, that a considerable proportion of these students might have personality characteristics which would bear careful scrutiny might be of considerable consequence. The combination of low expectancy and depressed profiles would certainly appear to be a matter of concern, for it is one thing to hypothesize that moderate scores on such a test as the CPI might be beneficial to the making of a good librarian, but it is quite a different matter to contend that profiles with generally low elevations will contribute much toward the development of any professional person, particularly in academic settings. Because those students who rated themselves only between "2 and 6" on the Expectation scale actually had a group Social Maturity mean score that would classify them as erratic and undependable, a well structured inventory centered about a person's library expectations might prove of value to admissions personnel.

Another conclusion which seems to be supported by a considerable amount of evidence is that the longer these 150 students worked in positions other than teaching, the less was their job satisfaction. In view of this finding, it should be stressed that correlation tests among the women indicated a positive association between the number of years spent in teaching and self-ratings on the Satisfaction scale. That the number years worked did have some impact on the manner in which CPI questions were answered was also evident in the fact that women who had worked the greatest number of years had substantially higher mean scores--especially on socialization and maturity--than women with fewer years of work experience. A similar finding, though less significant in statistical terms, was evident from data generated by the men. While definitive conclusions on such a point must await further research, it may be that those persons who bring a substantial amount of highly satisfying teaching experience to the study of library science actually manifest fewer characteristics of carelessness, defensiveness, self-pitying, and pessimism.

If the field of librarianship does need men and women who possess dynamic qualities commonly associated with being progressive, mature, intelligent, forceful, and articulate, it would appear from these data that more care should be given to recruiting potential librarians who place a high premium on academic matters and who are not exhausted from several years of unsatisfying work. If it should be established that librarians throughout the United States typically score no higher than did these students on aggressiveness, imaginativeness, dedication to the pursuit of goals, and measures of intellectual efficiency, there could be considerable room for doubt as to the probability of librarians, and more particularly academic librarians, ever projecting themselves as innovative educators who are crucial to the learning process.

Insofar as comparatively high scores on the CPI indicate desirable traits for librarians to possess, it would seem that married women bring more to the field than single women in such characteristics as maturity, freedom from non-judgmental social beliefs, and adjustment to personal problems. By the same token, men seem to score higher than all women on measures of ambition, range of interests, confidence, and acceptance of self. It must be stressed, however, that scores generated by neither men nor women could be considered as indicative of truly high elevation samples.

Recommendations

In any exploratory study such as this, it is axiomatic that what is most needed is more study. This is particularly true in the present case, for only the smallest amount of information is currently available on this topic and fruitful lines of investigation are open in virtually any direction one wishes to follow. Moreover, studies in this area need to be made which utilize the various types of research; to date the few explorations made have been entirely with statistical measures.

Paramount in this need for information is the question of what constellation of personality characteristics do make, and should make, the best librarian. A related and perhaps even more important question is what impact should today's librarians be making on the social order, and what role should a dynamic library program be playing within the context of American education. If, as is the case on many college and university campuses, librarians are needed only to buy and catalog books, then it is quite likely that persons possessed of narrow interests, inhibited perspectives, and retiring natures can do the task perfectly well. On the other hand, if education--and especially higher education--needs people who know how to promote the value of libraries throughout the learning process, then librarians will need those traits commonly associated with efficient use of intellect, a capacity for gaining status, and the resourcefulness which is borne of a self-confident spirit.

And beyond the matter of merely discovering what personality traits are found in successful and unsuccessful librarians is the need to know whether library schools are actually receiving a disproportionate number of persons with less desirable personalities who have not been successful in other lines of work. Comparative studies in this area might not be as difficult to accomplish as it would first appear, for a number of occupations other than librarianship characteristically admit persons to professional training after they have been working in other fields. The ministry is perhaps one such example, and with this in mind comparisons could be made on measurable traits that are manifested by students who enter schools of library science and divinity. Other techniques would involve doing extensive background work on a number of individuals with a view toward obtaining ratings from supervisors and colleagues. Such ratings could then be compared and correlated to data that in one way or another gave valid interpretations concerning personality variables.

A final area for study should be centered around the motivation patterns which cause persons to enter library science, particularly after some years experience in other fields. To date, information has come from virtually everything except that which qualifies as rigorous research. As a result only questionnaire-type material is available and this has usually taken the form of merely asking respondents to name a reason or two for going to library school. And if the data-gathering process has been inadequate, the responses have been equally unsatisfactory, for typically such answers as, "I like books," or "Some acquaintance advised me to look into library work," have been given. Needless to say, such data give virtually no real insight into the reasons for accepting or rejecting a given occupation.

From every side the public, and more especially the academic community, is constantly being bombarded with pronouncements on the importance of libraries. Business organizations of every description have long recognized the importance of outstanding personnel in their work, and most of them make strenuous efforts to attract superior individuals. While the library schools have probably spent as much effort in this direction as other professions, it is questionable whether they really know just what type of person they need. It may be, for example, that individuals with certain combinations of otherwise desirable personality traits would be restive and constantly pressing for change if placed in a typical library position. Research, of course, is only one tool that is open to those who have the task of identifying talent, but it is one that is immediately at hand and its implementation in the critical area of personality adjustment could result in benefits to the library profession that would make a major impact on the course of American education. On the other hand, the fact that there is "a typical library position" may be the reason why restive and innovative-minded persons are seldom found in libraries.

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APPENDIX

TABLE 1

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON BANK MANAGERS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Bank Managers N=25		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	30.2	4.3	1.2	.93
Cs	20.2	5.2	21.3	3.2	1.1	.92
Sy	24.3	5.2	25.4	4.3	1.0	.85
Sp	35.9	7.4	36.4	5.2	0.5	.28
Sa	22.0	3.9	19.6	3.3	2.4	2.46
Wb	36.8	5.3	40.5	2.7	3.6	3.06
Re	29.9	5.1	33.2	3.6	3.2	2.73
So	34.8	5.8	39.0	5.1	4.2	2.85
Sc	27.5	6.6	34.8	6.9	7.2	4.07
To	22.7	5.8	25.2	4.0	2.5	1.83
Gi	17.0	5.1	21.2	7.2	4.1	2.60
Cm	24.6	3.3	26.5	1.3	1.9	2.68
Ac	27.5	4.9	30.6	4.0	3.0	2.47
Ai	20.8	5.5	22.1	3.3	1.2	1.03
Ie	39.5	6.4	41.2	4.2	1.6	1.14
Py	11.6	3.8	12.1	2.5	.5	.56
Fx	9.7	3.8	8.7	3.6	1.0	1.02
Fe	18.1	3.0	16.4	3.4	1.7	2.16

$*p < .05$ @ d.f.-58
$**p < .01$

TABLE 2

MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARE MALE LIBRARY STUDENTS TO
DATA ON BUSINESS EXECUTIVES
PRESENTED IN CPI MANUAL

	Male Library Students N=35		Business Executives N=107		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	29.5	6.7	.6	.47
Cs	20.2	5.2	20.5	4.3	.3	.33
Sy	24.3	5.2	25.4	5.5	1.0	1.03
Sp	35.9	7.4	36.1	5.4	.2	.17
Sa	22.0	3.9	20.7	4.4	1.4	1.54
Wb	36.8	5.3	39.8	3.4	2.9	3.73
Re	29.9	5.1	31.5	5.7	1.6	1.46
So	34.8	5.8	37.5	5.1	2.7	2.60
Sc	27.5	6.6	32.9	7.1	5.3	3.94
To	22.7	5.8	24.5	5.1	1.8	1.73
Gi	17.0	5.1	20.0	6.8	3.0	2.38
Cm	24.6	3.3	26.3	1.4	1.7	4.24
Ac	27.5	4.9	28.7	5.2	1.0	1.09
Ai	20.8	5.5	19.7	4.8	1.1	1.12
Ie	39.5	6.4	40.1	6.3	.5	.48
Py	11.6	3.8	12.2	3.1	.6	.93
Fx	9.7	3.8	9.3	3.6	.3	.56
Fe	18.1	3.0	16.2	3.5	2.0	3.03

*$p < .05$
**$p < .01$ @ d.f.=140

TABLE 3

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON CORRECTIONAL OFFICERS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Correctional Officers N=192		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	27.2	5.5	1.7	1.66
Cs	20.2	5.2	18.8	3.9	1.3	1.83
Sy	24.3	5.2	24.0	5.1	.2	.31
Sp	35.9	7.4	33.8	5.7	2.0	1.89
Sa	22.0	3.9	19.8	3.7	2.2	3.19
Wb	36.8	5.3	38.3	4.2	1.4	1.72
Re	29.9	5.1	30.4	5.0	.5	.54
So	34.8	5.8	36.3	5.2	1.5	1.53
Sc	27.5	6.6	32.5	7.2	5.0	3.80
To	22.7	5.8	22.0	4.9	.6	.75
Gi	17.0	5.1	20.0	6.5	3.0	2.57
Cm	24.6	3.3	26.3	2.1	1.7	3.95
Ac	27.5	4.9	27.9	4.3	.2	.36
Ai	20.8	5.5	18.1	4.1	2.7	3.36
Ie	39.5	6.4	38.4	5.4	1.1	1.07
Py	11.6	3.8	11.0	2.4	.5	1.21
Fx	9.7	3.8	7.9	3.7	1.7	2.63
Fe	18.1	3.0	16.3	6.0	1.8	1.82

*p<.05 @ d.f.=225
**p<.01

TABLE 4

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON SCHOOL SUPERINTENDENTS PRESENTED IN CPI MANUAL

	Male Library Students N=35		School Superintendents N=144		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	28.9	5.8	31.8	5.3	2.9	2.83
Cs	20.2	5.2	21.2	3.5	1.0	1.35
Sy	24.3	5.2	25.4	4.5	1.0	1.24
Sp	35.9	7.4	35.8	5.2	.0	.09
Sa	22.0	3.9	21.8	3.6	.2	.28
Wb	36.8	5.3	38.7	3.7	1.8	2.33
Re	29.9	5.1	33.9	3.5	3.9	5.46
So	34.8	5.8	37.7	4.3	2.9	3.30
Sc	27.5	6.6	30.7	7.5	3.1	2.30
To	22.7	5.8	25.0	4.0	2.3	2.75
Gi	17.0	5.1	19.1	5.9	2.0	1.92
Cm	24.6	3.3	26.6	1.3	2.0	5.64
Ac	27.5	4.9	30.1	4.0	2.5	3.14
Ai	20.8	5.5	21.3	3.6	.5	.65
Ie	39.5	6.4	40.5	4.8	1.0	1.02
Py	11.6	3.8	11.8	2.7	.2	.35
Fx	9.7	3.8	9.7	3.4	.0	- .00
Fe	18.1	3.0	16.6	3.6	1.5	2.43

*$p < .05$ @ d.f.=177
**$p < .01$

TABLE 5

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON MACHINE OPERATORS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Machine Operators N=105		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	28.9	5.8	26.5	4.6	2.3	2.47
Cs	20.2	5.2	18.8	4.2	1.3	1.59
Sy	24.3	5.2	24.4	4.9	.0	.10
Sp	35.9	7.4	33.3	5.5	2.5	2.19
Sa	22.0	3.9	18.2	3.8	3.8	5.05
Wb	36.8	5.3	38.5	4.0	1.6	1.86
Re	29.9	5.1	31.1	5.0	1.2	1.21
So	34.8	5.8	36.1	5.0	1.3	1.26
Sc	27.5	6.6	34.7	7.0	7.1	5.30
To	22.7	5.8	23.2	4.5	.5	.52
Gi	17.0	5.1	22.1	5.9	5.0	4.54
Cm	24.6	3.3	26.4	1.8	1.7	4.03
Ac	27.5	4.9	27.3	4.2	.2	.34
Ai	20.8	5.5	18.1	4.0	2.7	3.10
Ie	39.5	6.4	38.5	5.0	1.0	.94
Py	11.6	3.8	11.3	2.0	.2	.59
Fx	9.7	3.8	7.8	3.4	1.8	2.77
Fe	18.1	3.0	16.7	3.1	1.5	2.50

*p<05 @ d.f.=138
**p<01

TABLE 6

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON PSYCHIATRIC RESIDENTS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Psychiatric Residents N=262		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	30.9	5.6	2.0	1.96
Cs	20.2	5.2	23.3	2.6	3.1	5.67
Sy	24.3	5.2	27.3	4.4	3.0	3.69
Sp	35.9	7.4	40.5	4.8	4.6	4.92
Sa	22.0	3.9	23.7	3.2	1.6	2.86
Wb	36.8	5.3	37.9	3.6	1.0	1.44
Re	29.9	5.1	31.7	4.0	1.7	2.40
So	34.8	5.8	36.0	4.0	1.2	1.56
Sc	27.5	6.6	29.3	6.4	1.7	1.55
To	22.7	5.8	25.9	3.4	3.2	4.70
Gi	17.0	5.1	17.2	5.7	0.1	.19
Cm	24.6	3.3	25.9	1.6	1.2	3.82
Ac	27.5	4.9	30.6	3.7	3.0	4.30
Ai	20.8	5.5	25.5	2.8	4.7	8.03
Ie	39.5	6.4	44.1	3.7	4.5	6.19
Py	11.6	3.8	14.8	2.8	3.2	6.03
Fx	9.7	3.8	13.9	3.4	4.2	6.76
Fe	18.1	3.0	17.6	3.2	.5	1.04

*$p < .05$ @ d.f.=295
**$p < .01$

TABLE 7

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON PRACTICING DENTISTS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Practicing Dentists N=59		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	31.3	5.2	2.4	2.04
Cs	20.2	5.2	21.6	3.2	1.4	1.59
Sy	24.3	5.2	26.9	4.3	2.5	2.58
Sp	35.9	7.4	35.9	5.7	.0	.0
Sa	22.0	3.9	21.8	3.3	.2	.26
Wb	36.8	5.3	39.8	3.0	2.9	3.35
Re	29.9	5.1	34.1	3.8	4.2	4.49
So	34.8	5.8	38.8	4.5	4.0	3.69
Sc	27.5	6.6	33.1	6.3	5.5	4.04
To	22.7	5.8	25.5	3.9	2.8	2.76
Gi	17.0	5.1	20.5	5.9	3.5	2.89
Cm	24.6	3.3	26.5	1.5	1.9	3.76
Ac	27.5	4.9	30.9	3.9	3.2	3.55
Ai	20.8	5.5	20.6	3.5	.2	.21
Ie	39.5	6.4	41.8	3.6	2.2	2.20
Py	11.6	3.8	12.9	2.3	1.3	2.04
Fx	9.7	3.8	8.1	3.7	1.6	2.00
Fe	18.1	3.0	17.2	3.6	1.0	1.38

*p<.05 @ d.f.=92
**p<.01

TABLE 8

MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARE MALE LIBRARY STUDENTS TO
DATA ON ARCHITECTS PRESENTED
IN CPI MANUAL

	Male Library Students N=35		Architects N=124		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	30.9	5.1	2.0	1.97
Cs	20.2	5.2	22.2	3.0	2.0	2.88
Sy	24.3	5.2	24.3	4.5	.0	.00
Sp	35.9	7.4	37.1	5.1	1.2	1.09
Sa	22.0	3.9	22.5	3.8	.4	.67
Wb	36.8	5.3	37.7	3.5	.8	1.04
Re	29.9	5.1	32.6	3.8	2.7	3.40
So	34.8	5.8	36.6	4.6	1.8	1.91
Sc	27.5	6.6	30.0	6.2	2.5	2.06
To	22.7	5.8	23.9	3.7	1.2	1.46
Gi	17.0	5.1	17.4	5.7	.3	.37
Cm	24.6	3.3	25.4	1.7	.7	1.92
Ac	27.5	4.9	29.0	4.1	1.4	1.69
Ai	20.8	5.5	22.4	3.6	1.5	2.02
Ie	39.5	6.4	40.4	4.0	.8	1.00
Py	11.6	3.8	13.6	2.4	2.0	3.74
Fx	9.7	3.8	10.6	4.2	.8	1.14
Fe	18.1	3.0	18.5	3.2	.3	.49

$*p < .05$ @ d.f.=157
$**p < .01$

TABLE 9

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON RESEARCH SCIENTISTS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Research Scientists N=45		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	31.6	4.7	2.7	2.27
Cs	20.2	5.2	24.1	2.4	3.9	4.40
Sy	24.3	5.2	27.4	4.4	3.0	2.84
Sp	35.9	7.4	41.0	4.6	5.1	3.73
Sa	22.0	3.9	23.1	3.5	1.0	1.30
Wb	36.8	5.3	40.2	2.5	3.3	3.63
Re	29.9	5.1	34.1	3.2	4.2	4.44
So	34.8	5.8	36.1	4.5	1.3	1.11
Sc	27.5	6.6	32.7	5.3	5.1	3.85
To	22.7	5.8	27.1	3.3	4.4	4.22
Gi	17.0	5.1	19.4	5.1	2.3	2.06
Cm	24.6	3.3	25.7	1.4	1.0	1.98
Ac	27.5	4.9	31.0	3.3	3.4	3.65
Ai	20.8	5.5	25.1	2.7	4.3	4.52
Ie	39.5	6.4	44.2	3.0	4.6	4.29
Py	11.6	3.8	16.6	2.5	5.0	6.98
Fx	9.7	3.8	13.3	3.9	3.6	4.13
Fe	18.1	3.0	17.3	2.6	0.8	1.44

*$p < .05$ @ d.f.=78
**$p < .01$

TABLE 10

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON PSYCHOLOGY GRADUATE STUDENTS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Psychology Grad. Students N=117		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	30.1	5.4	1.2	1.12
Cs	20.2	5.2	24.4	2.6	4.2	6.40
Sy	24.3	5.2	26.4	4.6	2.0	2.28
Sp	35.9	7.4	42.5	4.6	6.6	6.33
Sa	22.0	3.9	23.7	3.1	1.5	2.65
Wb	36.8	5.3	36.9	3.5	.0	.00
Re	29.9	5.1	31.6	3.6	1.7	2.19
So	34.8	5.8	34.5	4.2	.2	.33
Sc	27.5	6.6	27.8	5.5	.2	.26
To	22.7	5.8	27.0	2.7	4.3	6.06
Gi	17.0	5.1	15.4	5.0	1.6	1.64
Cm	24.6	3.3	25.1	1.7	.5	1.18
Ac	27.5	4.9	29.3	3.9	1.7	2.11
Ai	20.8	5.5	27.1	2.8	6.3	9.00
Ie	39.5	6.4	44.9	3.2	5.3	6.69
Py	11.6	3.8	16.9	2.6	5.3	9.35
Fx	9.7	3.8	16.5	3.4	6.8	10.10
Fe	18.1	3.0	16.9	2.9	1.2	2.31

*$p<.05$ @ d.f.-150
**$p<.01$

TABLE 11

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON MEDICAL SCHOOL APPLICANTS PRESENTED IN CPI MANUAL

	Male Library Students N-35		Medical School Applicants N-70		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	28.9	5.8	31.6	4.4	2.7	2.63
Cs	20.2	5.2	23.9	3.0	3.7	4.56
Sy	24.3	5.2	28.8	3.7	4.5	5.05
Sp	35.9	7.4	40.2	5.2	4.3	3.41
Sa	22.0	3.9	24.2	2.9	2.1	3.22
Wb	36.8	5.3	39.7	2.8	2.8	3.50
Re	29.9	5.1	34.0	3.9	4.1	4.52
So	34.8	5.8	39.3	4.8	4.5	4.17
Sc	27.5	6.6	31.3	5.8	3.7	2.99
To	22.7	5.8	27.2	3.6	4.5	4.83
Gi	17.0	5.1	20.5	5.7	3.5	3.04
Cm	24.6	3.3	26.4	1.4	1.7	3.87
Ac	27.5	4.9	31.4	3.1	3.7	4.78
Ai	20.8	5.5	23.7	3.3	2.8	3.33
Ie	39.5	6.4	44.3	3.1	4.7	5.12
Py	11.6	3.8	13.8	2.4	2.2	3.57
Fx	9.7	3.8	11.9	3.5	2.2	2.94
Fe	18.1	3.0	16.4	3.6	1.7	2.54

*p<.05 @ d.f=103
**p<.01

TABLE 12

MEANS, STANDARD DEVIATIONS, AND "t" SCORES
WHICH COMPARE MALE LIBRARY STUDENTS TO
DATA ON SOCIAL WORK GRADUATE STUDENTS
PRESENTED IN CPI MANUAL

	Male Library Students N=35		Social Work Grad. Stud. N=87		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	28.9	5.8	30.9	5.1	2.0	2.07
Cs	20.2	5.2	22.6	3.2	2.4	3.61
Sy	24.3	5.2	27.0	4.1	2.7	3.40
Sp	35.9	7.4	40.5	5.8	4.6	4.08
Sa	22.0	3.9	23.0	3.1	0.9	1.66
Wb	36.9	5.3	38.9	3.8	2.0	2.65
Re	29.9	5.1	32.2	3.8	2.2	3.08
So	34.8	5.8	36.4	4.6	1.6	1.79
Sc	27.5	6.6	31.1	5.7	3.5	3.32
To	22.7	5.8	26.3	4.0	3.6	4.49
Gi	17.0	5.1	19.6	5.7	2.5	2.50
Cm	24.6	3.3	25.5	1.9	0.9	2.23
Ac	27.6	4.9	30.1	3.7	2.5	3.45
Ai	20.8	5.5	24.2	3.5	3.3	4.73
Ie	39.5	6.4	42.8	4.1	3.2	3.92
Py	11.6	3.8	14.3	2.8	2.7	4.89
Fx	9.7	3.8	13.7	3.9	4.0	5.58
Fe	18.2	3.0	17.1	3.3	1.0	1.83

*$p < .05$ @ d.f=177
**$p < .01$

TABLE 13

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE MALE LIBRARY STUDENTS TO DATA ON MILITARY OFFICERS PRESENTED IN CPI MANUAL

	Male Library Students N=35		Military Officers N=343		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	28.9	5.8	31.8	5.6	2.9	2.90
Cs	20.2	5.2	21.6	3.6	1.4	2.08
Sy	24.3	5.2	27.3	4.4	3.0	3.76
Sp	35.9	7.4	38.4	3.8	2.5	3.29
Sa	22.0	3.9	23.0	3.4	1.0	1.62
Wb	36.8	5.3	39.0	3.7	2.1	3.04
Re	29.9	5.1	32.2	4.4	2.2	2.89
So	34.8	5.8	36.3	4.7	1.5	1.75
Sc	27.5	6.6	29.6	7.5	2.0	1.59
To	22.7	5.8	23.5	4.3	0.8	1.00
Gi	17.0	5.1	19.2	6.3	2.1	1.99
Cm	24.6	3.3	26.5	1.5	1.9	6.11
Ac	27.5	4.9	29.3	4.4	1.7	2.14
Ai	20.8	5.5	20.0	3.6	.7	1.17
Ie	39.5	6.4	40.7	4.4	1.1	1.45
Py	11.6	3.8	11.9	2.5	.3	.63
Fx	9.7	3.8	8.5	3.5	1.1	1.91
Fe	18.1	3.0	14.6	3.3	3.5	6.19

*p<.05 @ d.f.=376
**p<.01

TABLE 14

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE FEMALE LIBRARY STUDENTS TO DATA ON SOCIAL WORK GRADUATE STUDENTS PRESENTED IN CPI MANUAL

	Female Library Students N=115		Social Work Grad. Stud. N=324		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	27.3	6.6	29.0	5.0	1.7	2.85
Cs	19.6	3.8	23.1	3.0	3.5	9.86
Sy	23.2	5.9	24.8	4.4	1.6	3.03
Sp	33.0	7.4	39.8	5.4	6.7	10.43
Sa	20.9	4.2	22.2	3.6	1.2	3.17
Wb	35.5	4.6	38.2	3.7	2.6	6.27
Re	33.2	4.4	33.4	3.5	0.1	.48
So	38.4	5.3	38.0	4.6	-0.3	.76
Sc	30.3	7.1	32.1	7.1	1.7	2.32
To	22.5	4.7	27.0	3.1	4.5	11.52
Gi	17.2	5.8	19.5	6.1	2.3	3.49
Cm	25.7	1.8	25.5	1.7	-0.1	1.06
Ac	28.5	4.1	29.7	3.5	1.1	2.98
Ai	21.3	3.8	25.8	3.3	4.5	11.92
Ie	38.7	5.6	43.1	3.3	4.4	9.94
Py	11.5	2.8	14.1	2.8	2.5	8.45
Fx	9.8	4.0	14.3	3.3	4.5	11.82
Fe	23.8	2.9	22.3	3.5	-1.5	4.11

p. .05
p. .01
d.f.=437

TABLE 15

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE FEMALE LIBRARY STUDENTS TO DATA ON PSYCHOLOGY GRADUATE STUDENTS PRESENTED IN CPI MANUAL

	Female Library Students N=115		Psychology Grad. Stud. N=19		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff. in Means	"t" Score
Do	27.3	6.6	27.5	5.6	0.2	.12
Cs	19.6	3.8	23.0	2.7	3.4	3.63
Sy	23.2	5.9	25.6	4.5	2.4	1.68
Sp	33.0	7.4	39.6	5.6	6.5	3.68
Sa	20.9	4.2	21.4	3.5	0.5	.48
Wb	35.5	4.6	36.4	4.5	0.8	.78
Re	33.2	4.4	32.5	3.2	-0.6	.66
So	38.4	5.3	36.8	3.8	-1.5	1.23
Sc	30.3	7.1	29.1	6.8	-1.2	.67
To	22.5	4.7	26.3	3.0	3.7	3.38
Gi	17.2	5.8	15.1	5.7	-2.0	1.43
Cm	25.7	1.8	25.0	1.1	-0.6	1.63
Ac	28.5	4.1	28.5	3.5	.0	.0
Ai	21.3	3.8	27.7	1.8	6.3	6.97
Ie	38.7	5.6	44.3	3.0	5.5	4.15
Py	11.5	2.8	15.6	2.5	4.0	5.77
Fx	9.8	4.0	16.5	2.2	6.7	7.07
Fe	23.8	2.9	23.0	2.1	-0.7	1.14

p. .05 d.f.=132
p. .01

TABLE 16

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE FEMALE LIBRARY STUDENTS TO DATA ON AIRLINE HOSTESSES PRESENTED IN CPI MANUAL

	Female Library Students N=115		Airline Hostesses N=60		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	27.3	6.6	29.8	5.9	2.5	2.45
Cs	19.6	3.8	22.2	3.2	2.5	4.41
Sy	23.2	5.9	26.7	4.0	3.5	4.10
Sp	33.0	7.4	39.0	5.0	6.0	5.61
Sa	20.9	4.2	23.6	2.8	2.7	4.46
Wb	35.5	4.6	37.6	3.3	2.0	3.12
Re	33.2	4.4	30.9	3.8	-2.2	3.41
So	38.4	5.3	38.1	4.5	-0.2	.36
Sc	30.3	7.1	28.6	5.9	-1.7	1.56
To	22.5	4.7	24.5	3.5	2.0	2.88
Gi	17.2	5.8	19.3	5.1	2.1	2.32
Cm	25.7	1.8	25.6	1.8	- .0	.34
Ac	28.5	4.1	27.9	3.6	- .6	.93
Ai	21.3	3.8	21.1	2.7	- .2	.35
Ie	38.7	5.6	40.2	4.1	1.5	1.79
Py	11.5	2.8	10.8	2.4	- .7	1.59
Fx	9.8	4.0	11.2	3.2	1.3	2.33
Fe	23.8	2.9	21.6	3.0	-2.2	4.68

p. .05 d.f.=173
p. .01

TABLE 17

MEANS, STANDARD DEVIATIONS, AND "t" SCORES WHICH COMPARE FEMALE LIBRARY STUDENTS TO DATA ON NURSES PRESENTED IN CPI MANUAL

	Female Library Students N=115		Nurses N=43		Statistic	
Scale	Means	S.D.	Means	S.D.	Diff.in Means	"t" Score
Do	27.3	6.6	26.4	4.8	-0.9	.81
Cs	19.6	3.8	20.2	2.9	0.5	.91
Sy	23.2	5.9	26.2	4.2	3.0	3.03
Sp	33.0	7.4	34.8	5.7	1.7	1.43
Sa	20.9	4.2	21.7	3.8	.7	1.08
Wb	35.5	4.6	37.0	3.9	1.5	1.88
Re	33.2	4.4	32.5	4.2	-0.6	.89
So	38.4	5.3	39.4	5.4	1.0	1.02
Sc	30.3	7.1	27.5	7.2	-2.7	2.16
To	22.5	4.7	23.7	4.0	1.1	1.47
Gi	17.2	5.8	17.0	5.4	-0.1	.19
Cm	25.7	1.8	26.7	1.3	1.0	3.31
Ac	28.5	4.1	26.5	4.0	-2.0	2.68
Ai	21.3	3.8	19.5	3.7	-1.7	2.60
Ie	38.7	5.6	40.1	4.3	1.4	1.45
Py	11.5	2.8	9.1	2.5	-2.4	4.77
Fx	9.8	4.0	10.2	3.7	0.3	.56
Fe	23.8	2.9	22.2	3.7	-1.6	2.83

p. .05 d.f.=156
p. .01

TABLE 18

SOCIAL MATURITY MEANS OF 35 MALE LIBRARY STUDENTS WHEN ARRANGED BY AGE

Age Range	No. of Students	Means
25 or Less	10	49.505
26 -- 30	12	51.978
31 -- 40	8	48.973
Over 40	5	49.535

TABLE 19

SOCIAL MATURITY MEANS OF 35 MALE LIBRARY STUDENTS WHEN ARRANGED BY OCCUPATION

Occupation	No. of Students	Means
Teaching	11	50.692
Student	10	50.920
All Others	14	49.389

TABLE 20

SOCIAL MATURITY MEANS OF 35 MALE LIBRARY STUDENTS WHEN ARRANGED BY SELF-RANKINGS ON SATISFACTION SCALE

Satisfaction Rankings	No. of Students	Means
2 - 4	6	48.230
5 - 7	14	51.780
8 - 10	15	49.600

TABLE 21

SOCIAL MATURITY MEANS OF 35 MALE LIBRARY STUDENTS WHEN ARRANGED BY NUMBER OF YEARS WORKED

No. of Years Worked	No. of Students	Means
0 - Yrs	10	50.920
2 - Yrs	6	49.567
3 - 5 Yrs	6	50.095
6 - 10 Yrs	6	51.987
Over 10 Yr	7	48.450

TABLE 22

SOCIAL MATURITY MEANS OF 35 MALE LIBRARY STUDENTS WHEN ARRANGED BY TYPE OF LIBRARY IN WHICH THEY PLAN TO WORK

Type of Library	No. of Students	Means
Public School	3	50.58
College Library	19	50.39
Public Library	5	51.00
Special Library	8	48.97

TABLE 23

SOCIAL MATURITY MEANS OF 115 FEMALE LIBRARY STUDENTS WHEN ARRANGED BY AGE

Age Range	No. of Students	Means
22 or Less	20	52.303
23 -- 25	21	52.180
26 -- 30	17	52.031
31 -- 40	22	53.604
Over 40	35	52.580

TABLE 24

SOCIAL MATURITY MEANS OF 115 FEMALE LIBRARY STUDENTS WHEN ARRANGED BY NUMBER OF YEARS WORKED

No. of Years Worked	No. of Students	Means
0 - Yrs	34	52.045
1 - Yrs	14	53.979
2 - Yrs	10	54.042
3 - 5 Yrs	25	52.393
6 - 10 Yrs	11	51.356
Over 10 Yrs	21	52.651

TABLE 25

SOCIAL MATURITY MEANS OF 115 FEMALE LIBRARY STUDENTS WHEN ARRANGED BY TYPE OF LIBRARY IN WHICH THEY PLAN TO WORK

Type of Library	No. of Students	Means
Public School	33	52.485
College Library	43	52.737
Public Library	15	53.443
Special Library	24	51.859

PLEASE NOTE

The State University of New York, Brockport, N. Y., requests your help on this piece of sponsored research that is intended to identify outstanding personality characteristics in potential librarians. Neither the results of the Inventory nor information in the questionnaire will be seen by any faculty member at Oklahoma University; furthermore, absolutely no material in this survey will ever become part of your school record. There is no need to identify yourself by writing your name on any of these materials; in fact, it is hoped that anonymity will produce greater objectivity in the responses. Please read the instructions carefully and do not separate the questionnaire from the answer sheet.

QUESTIONNAIRE

Place a check (✓) in appropriate blank.

1. Marital status: Single____; Married____; Widow(er)____; Divorced or separated____.

2. Age: 22 or less____; 23-25____; 26-30____; 31-40____; Over 40____.

3. For men only Occupation immediately before entering library work or library study:
   Public school teaching____; full-time student____; military____;

   business____.

   If other, state____

4. For women only Occupation immediately before entering library work or library study:

   Public school teaching____; full-time student____; housewife____;

   office work____; if other, state____________________________

5. According to the following scale, rate the satisfaction you derived from the job checked in question 3 or 4.

   1___; 2___; 3___; 4___; 5___; 6___; 7___; 8___; 9___; 10___.
   Unsatisfying   Highly satisfying

6. In comparison to the satisfaction derived from the job checked in number 3 or 4, how satisfying have you found, or expect, library work to be?

1___; 2___; 3___; 4___; 5___; 6___; 7___; 8___; 9___; 10___.
Unsatisfying Highly satisfying

7. As of today, have you had experience in a professional library position?

Yes____ No____

8. If you are, or have ever been, a classroom teacher, how many years did you teach--or will have taught--before entering professional library work?

1___; 2___; 3-5___; 6-10___; Over 10___.

9. If you have never taught, approximately how many years were you employed in a full-time capacity before studying library science?

0___; 1___; 2___; 3-5___; 6-10___; Over 10___.

10. After completing library training, do you hope to be a librarian in

1. Public school___; 2. higher education___; 3. public library___;

4. special___.

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TITLE An Investigation of Personality Characteristics Among Library Students at One Midwestern University

PERSONAL AUTHOR(S) Clayton, Howard

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IDENTIFIERS

ABSTRACT Although libraries are venerated as agencies which are crucial to education, prestige connected with academic librarianship appears to rank as rather low-level administrative work. A parallel to this contradiction is that many persons before becoming librarians were either teachers or workers in some quasi-intellectual field which typically carries more pay, prestige, and professionalism. A possible explanation for such paradoxes is that many persons who feel dissatisfied in such pursuits might still wish to remain in an academic milieu but escape its attendant problems. In this connection, a small literature exists which shows that some teachers who leave the field because of conflict situations have certain personality traits in common with practicing librarians. Library students in this study had smaller mean scores than a composite of 14 occupations on 17 of the California Psychological Inventory's 18 scales. The one scale on which librarians had higher scores was Femininity. In addition, about 20 percent of the students were dissatisfied with former work, and this sample scored significantly lower than satisfied students on 7 of the CPI scales. Significant correlation was found between those who were satisfied with former work and those who expected high satisfaction from library work; moreover, those with high expectations scored above those with less optimism on 11 of the Inventory's scales. Librarians were found to have a mean Social Maturity score no higher than that of unselected samples; and, students who expected little satisfaction from library work scored significantly lower on this scale than those students expecting maximum satisfaction. Finally, a total of 16 out of 62 students, or 26 percent, who hoped to work in academic libraries, had such low scores on the CPI that their profiles were indicative of personality difficulties which this particular inventory identifies.